

Lego Challenge

Data

The dataset for today gives details on `price` and other characteristics of 6172 Lego toy sets, including the number of `Pieces` and `Minifigures` inside and the `Year` they were created, as well as the `Name`, `Theme`, `Subtheme` and `Item_Number` of each set.

In case you don't know the joy of lego, below is a minifigure sitting on a vehicle made of lego bricks and pieces:



Your Challenge

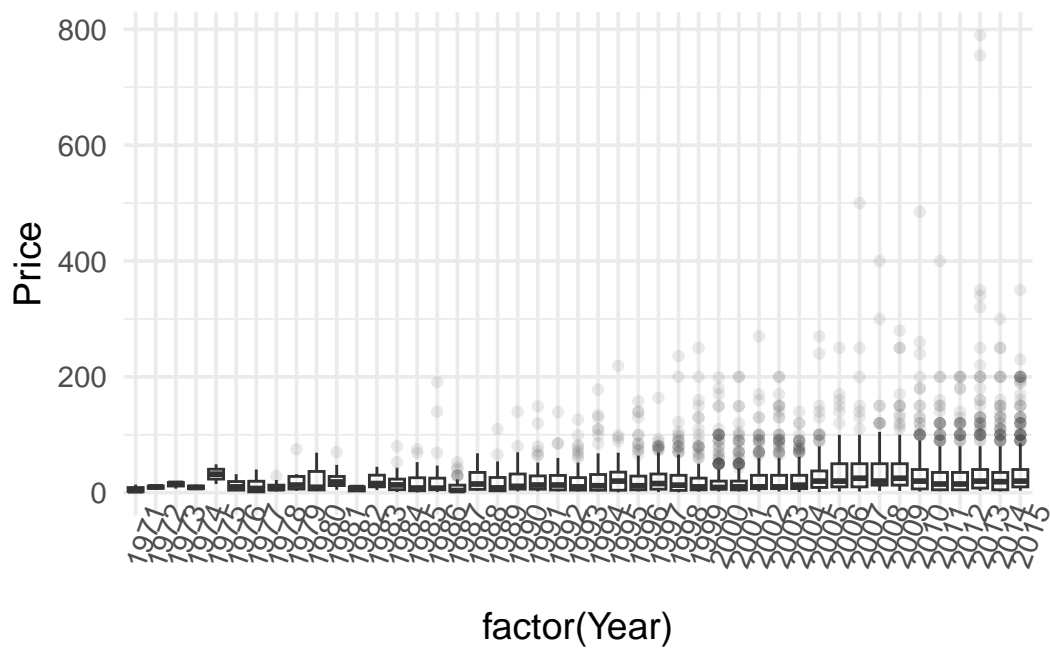
Some analysis is shown below (without explanation).

- How many problems or errors can you find?
- For each one, do you have a suggestion as to how to fix it?
- *First, make a list of the problems/errors and brief ideas of how to fix. If you have time, start trying to implement some of your fixes.*
- **At the end of group work time, submit on Moodle a copy of your work.**
- **Hint: The solution will probably involve a GAM...maybe *with* random effects.**

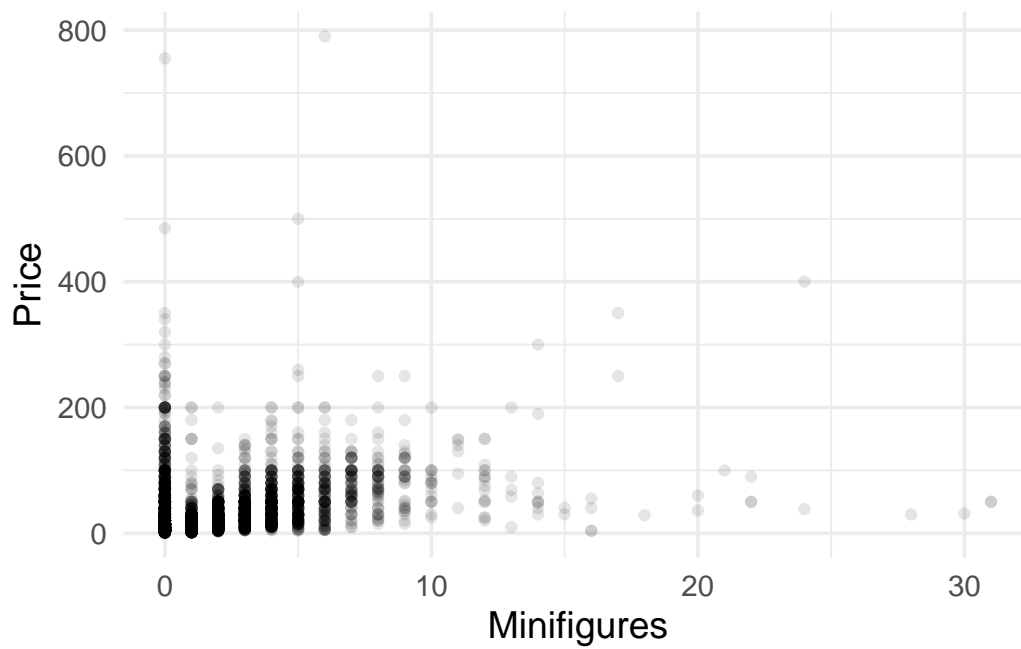
Analysis to Critique

```
legos <- read_csv('https://sldr.netlify.app/data/legos.csv') |>
  mutate(Theme = factor(Theme),
         Subtheme = factor(Subtheme))
```

```
gf_boxplot(Price ~ factor(Year),
           alpha = 0.1,
           data = legos) |>
  gf_theme(axis.text.x = element_text(angle = 70))
```

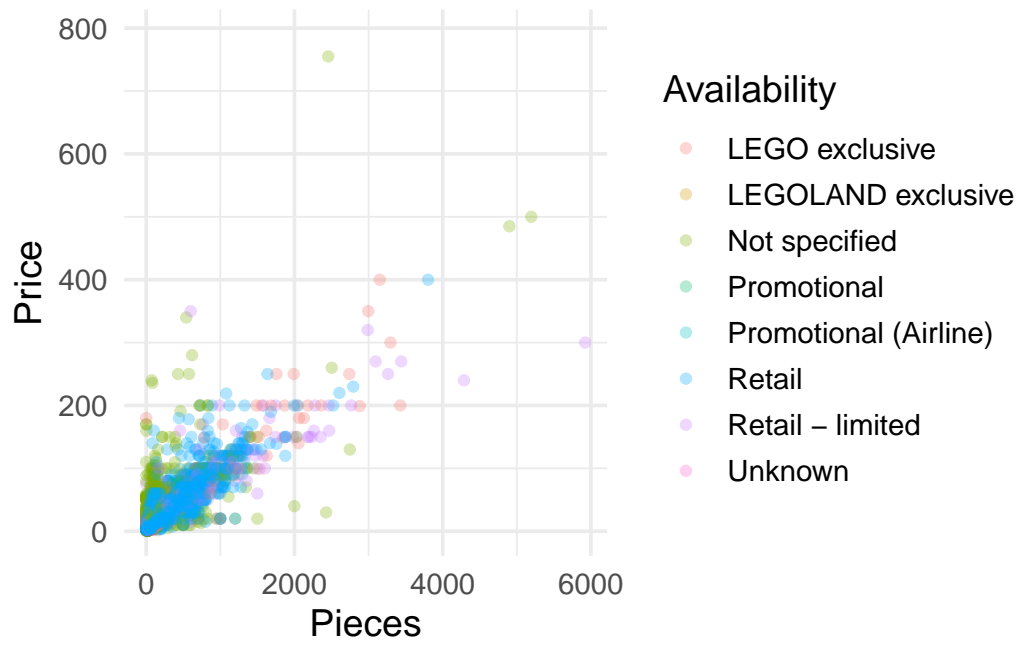


```
gf_point(Price ~ Minifigures,
         alpha = 0.1,
         data = legos)
```

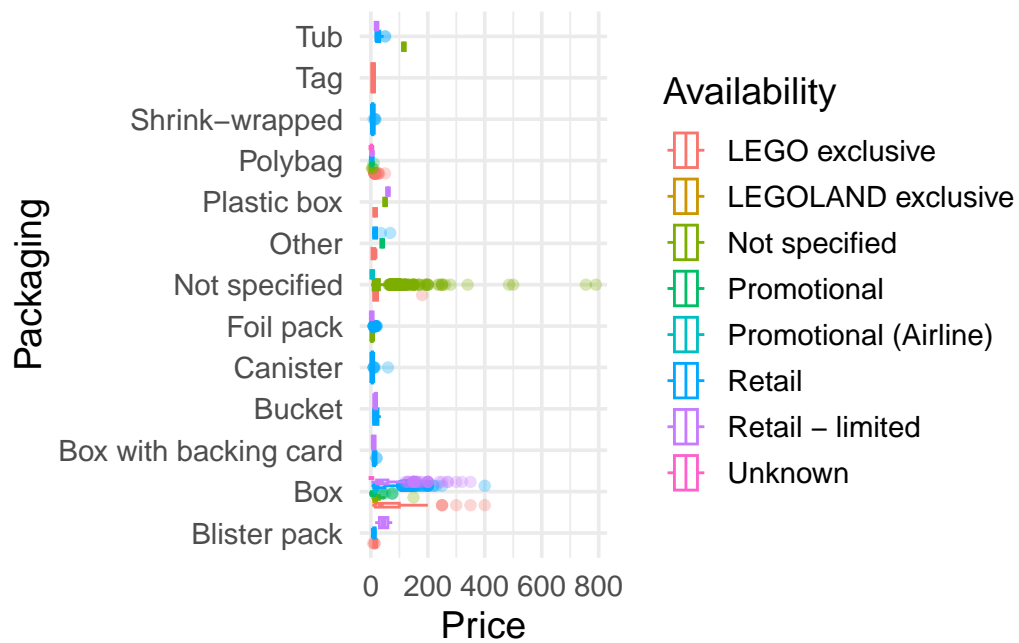


```
gf_point(Price ~ Pieces,  
  color = ~Availability,  
  alpha = 0.3,  
  scales = 'free',  
  data = legos)
```

Warning: Removed 71 rows containing missing values (`geom_point()`).



```
gf_boxplot(Packaging ~ Price,  
           color = ~Availability,  
           alpha = 0.3,  
           scales = 'free',  
           data = legos)
```



Model

```
lego_model <- lm(Price ~ Year +
  Pieces + Minifigures +
  Packaging*Availability+
  Theme + Subtheme,
  data = legos)
summary(lego_model)
```

Call:

```
lm(formula = Price ~ Year + Pieces + Minifigures + Packaging *
  Availability + Theme + Subtheme, data = legos)
```

Residuals:

Min	1Q	Median	3Q	Max
-130.612	-3.995	-0.179	2.270	222.941

Coefficients: (86 not defined because of singularities)

	Estimate
(Intercept)	-8.301e+02
Year	4.148e-01

Pieces	9.443e-02
Minifigures	1.758e+00
PackagingBox	1.347e+00
PackagingBox with backing card	-4.708e+01
PackagingBucket	2.177e+00
PackagingCanister	8.232e+00
PackagingFoil pack	4.990e+00
PackagingNot specified	1.303e+00
PackagingOther	-3.380e+01
PackagingPlastic box	-3.949e+01
PackagingPolybag	-6.541e+00
PackagingShrink-wrapped	6.474e+00
PackagingTag	-1.140e+00
AvailabilityLEGOLAND exclusive	-4.050e+00
AvailabilityNot specified	8.174e+00
AvailabilityPromotional	4.210e+00
AvailabilityPromotional (Airline)	-9.792e+00
AvailabilityRetail	-1.758e+00
AvailabilityRetail - limited	4.355e+01
AvailabilityUnknown	-4.485e+00
ThemeAdvanced Models	-2.897e+01
ThemeAdventurers	-1.338e+00
ThemeAlpha Team	1.165e+00
ThemeAquazone	-4.545e+00
ThemeArchitecture	9.010e-01
ThemeAssorted	-1.854e+00
ThemeBaby	1.455e+01
ThemeBasic	-1.083e+01
ThemeBelville	-2.183e+00
ThemeBen 10	1.261e+01
ThemeBionicle	-7.241e+00
ThemeBricks and More	-4.869e+00
ThemeBulk Bricks	-3.400e+00
ThemeCastle	-1.016e+01
ThemeCity	-1.745e+00
ThemeClikits	9.879e+00
ThemeCollectable Minifigures	-3.311e+01
ThemeCreator	3.272e+00
ThemeDacta	3.144e+01
ThemeDC Comics Super Heroes	-2.732e+00
ThemeDisney Princess	5.468e-01
ThemeDuplo	1.305e+01
ThemeEducation	3.894e+01

ThemeExo-Force	-1.157e+01
ThemeExplore	2.196e+00
ThemeFactory	-9.355e+00
ThemeFriends	-2.520e-02
ThemeGames	-1.365e+01
ThemeHarry Potter	-1.075e+01
ThemeIndiana Jones	3.273e+00
ThemeJuniors	-2.214e+01
ThemeLegends of Chima	-7.632e+00
ThemeLEGOLAND	2.516e+01
ThemeMarvel Super Heroes	-2.480e+00
ThemeMindstorms	4.576e+01
ThemeMinecraft	-3.240e+00
ThemeMiscellaneous	1.435e+00
ThemeMixels	-9.498e+00
ThemeMonster Fighters	-2.192e+00
ThemeNinjago	-1.473e+00
ThemePirates	-1.776e+01
ThemePower Functions	1.303e+01
ThemePrince of Persia	-9.095e+00
ThemePromotional	-4.576e-01
ThemeRacers	-1.449e+01
ThemeSamsonite	7.763e-01
ThemeSeasonal	-6.777e-01
ThemeService Packs	-1.504e+00
ThemeSpace	-3.250e+00
ThemeSports	9.840e+00
ThemeStar Wars	-8.210e+00
ThemeStudios	-1.206e+01
ThemeTechnic	2.573e+01
ThemeTeenage Mutant Ninja Turtles	-9.062e+00
ThemeThe Hobbit	-1.147e+01
ThemeThe Lord of the Rings	-1.745e+01
ThemeTime Cruisers	2.858e+00
ThemeTown	-5.118e-01
ThemeTrains	1.078e+01
ThemeWestern	7.792e+00
ThemeWorld City	-2.428e+00
Subtheme1.5	1.868e+01
Subtheme2.0	8.970e+01
Subtheme4.5/12 V	3.210e+00
Subtheme9 V	7.154e+00
SubthemeAccessories	5.504e+00

SubthemeAdventurers	3.637e+01
SubthemeAge of Ultron	-2.899e+00
SubthemeAgori	1.268e+01
SubthemeAircraft	2.031e+01
SubthemeAirjitzu	2.352e+00
SubthemeAirport	4.665e+00
SubthemeAladdin	-3.053e+00
SubthemeAlien Conquest	1.237e-01
SubthemeAlien Force	NA
SubthemeAn Unexpected Journey	1.139e+01
SubthemeAnimals series 1	-6.440e+00
SubthemeAnimals series 2	-8.346e+00
SubthemeAnimals series 3	-6.472e+00
SubthemeAnimals series 4	-8.673e+00
SubthemeAnimals series 5	-5.994e+00
SubthemeAquanauts	1.234e+01
SubthemeAquaraiders	1.437e+01
SubthemeAquasharks	1.366e+01
SubthemeAquazone	1.172e+01
SubthemeArchitect Series	7.153e+00
SubthemeArctic	5.399e+00
SubthemeAvengers	2.450e+00
SubthemeAvengers Assemble	-3.293e+00
SubthemeBaby	7.489e+00
SubthemeBarraki	1.281e+01
SubthemeBasic	-2.704e+01
SubthemeBasketball	-1.037e+01
SubthemeBatman	-5.073e+00
SubthemeBattle Figures	2.027e+01
SubthemeBattle Pack	1.266e+01
SubthemeBattle Vehicles	1.700e+01
SubthemeBeing Me	7.830e+00
SubthemeBelville	1.162e+01
SubthemeBirthday	-3.758e+00
SubthemeBlack Falcons	2.253e+00
SubthemeBlack Knights	8.989e+00
SubthemeBlacktron	6.606e+00
SubthemeBlacktron 2	1.250e+01
SubthemeBoats	2.231e+00
SubthemeBob the Builder	2.532e+00
SubthemeBohrok	1.412e+01
SubthemeBohrok Va	1.044e+01
SubthemeBohrok-Kal	1.371e+01

SubthemeBonus/Value Pack	4.428e+00
SubthemeBooster pack	-3.315e+00
SubthemeBrave	-2.827e+00
SubthemeBuildings	-1.019e+02
SubthemeCargo	9.659e-01
SubthemeCars	1.097e+01
SubthemeCastle	1.044e+01
SubthemeChamber of Secrets	7.457e+00
SubthemeChristmas	2.403e+00
SubthemeCinderella	-3.450e+00
SubthemeCircus	-2.079e+00
SubthemeCity	7.212e+00
SubthemeClassic	8.655e+00
SubthemeCoast Guard	1.068e+00
SubthemeCoastguard	2.319e+00
SubthemeCombi-pack	3.142e+01
SubthemeCompetition	-1.037e+01
SubthemeConstraction	7.482e+00
SubthemeConstruction	2.526e+00
SubthemeCowboys	-4.696e+00
SubthemeCrusaders	1.363e+01
SubthemeCube Dudes	2.655e+01
SubthemeCustom Cars	-1.175e+01
SubthemeDark Forest	8.219e+00
SubthemeDeathly Hallows	1.474e+00
SubthemeDeep Jungle	5.365e+00
SubthemeDeep Sea Explorers	6.307e+00
SubthemeDesert	-1.905e+00
SubthemeDesigner Set	-2.022e+01
SubthemeDesk accessory	-8.527e+00
SubthemeDino	1.139e+01
SubthemeDino Island	3.356e+00
SubthemeDisney	1.088e+01
SubthemeDisney Planes	3.775e+00
SubthemeDisney Princess	1.148e+00
SubthemeDisney's Baby Mickey	NA
SubthemeDivers	6.227e+00
SubthemeDolls	2.351e+00
SubthemeDora the Explorer	1.225e+01
SubthemeDragon Knights	1.540e+01
SubthemeDrome Racers	2.457e+01
SubthemeDuplo	1.116e+01
SubthemeEaster	-6.332e-02

SubthemeEmergency	-3.902e+00
SubthemeEpisode I	4.198e-01
SubthemeEpisode II	4.635e+00
SubthemeEpisode III	2.957e+00
SubthemeEpisode IV-VI	5.925e+00
SubthemeEpisode V	2.825e+01
SubthemeEpisode VII	1.496e+01
SubthemeEV3	2.018e+01
SubthemeExpanded Universe	5.077e+00
SubthemeExplore	3.043e+01
SubthemeExploriens	5.512e+00
SubthemeExtreme Team	-1.573e-01
SubthemeFairground	-2.864e+01
SubthemeFairy-Tale	1.537e+01
SubthemeFairytale	3.055e+01
SubthemeFall	-1.782e+00
SubthemeFantasy Era	7.557e+00
SubthemeFarm	3.722e+00
SubthemeFerrari	6.609e+00
SubthemeFire	1.293e+00
SubthemeFlight	-1.153e+00
SubthemeFootball	-1.247e+01
SubthemeForest Animals	4.826e-01
SubthemeForest Fire	-3.629e+00
SubthemeForest Police	-6.771e-01
SubthemeForestmen	9.329e+00
SubthemeFright Knights	1.142e+01
SubthemeFrozen	-6.378e-01
SubthemeFuturon	1.790e+01
SubthemeGalaxy Squad	1.246e-01
SubthemeGeneral	-7.867e+00
SubthemeGlatorian	1.507e+01
SubthemeGlatorian Legends	1.522e+01
SubthemeGoblet of Fire	-4.053e+00
SubthemeGolden City	6.724e+00
SubthemeGravity Games	-2.393e+00
SubthemeGuardians of the Galaxy	3.818e-02
SubthemeHalf-Blood Prince	1.399e+00
SubthemeHalloween	-1.877e-01
SubthemeHarbour	9.433e+00
SubthemeHeroica	NA
SubthemeHockey	-1.061e+01
SubthemeHoliday	2.830e+00

SubthemeHydronauts	1.627e+01
SubthemeIce Planet 2002	7.921e+00
SubthemeImagination	1.539e+01
SubthemeImperial Armada	2.342e+01
SubthemeImperial Guards	2.291e+01
SubthemeIndians	NA
SubthemeInsectoids	1.017e+01
SubthemeInventor Set	-5.077e-01
SubthemeIron Man 3	-5.921e+00
SubthemeIslanders	2.327e+01
SubthemeJake and the Never Land Pirates	9.540e-01
SubthemeJungle	4.254e+00
SubthemeJungle Rescue	-6.518e+00
SubthemeJurassic Park III	1.901e+01
SubthemeJustice League	-2.069e+00
SubthemeKingdom of the Crystal Skull	-1.361e+01
SubthemeKingdoms	5.484e+00
SubthemeKnights' Kingdom I	1.283e+01
SubthemeKnights' Kingdom II	1.214e+01
SubthemeLamborghini	-3.274e+00
SubthemeLandmark series	-2.471e+01
SubthemeLandmark Series	NA
SubthemeLarge Vehicle	-4.676e+00
SubthemeLast Crusade	-8.210e+00
SubthemeLaunch Command	8.059e-01
SubthemeLegend Beasts	-1.551e+00
SubthemeLEGO brand store opening set	7.559e-01
SubthemeLEGO brand stores	-8.546e+00
SubthemeLEGO Universe	2.019e+00
SubthemeLEGO Ville	1.185e+01
SubthemeLeisure	1.533e+00
SubthemeLife On Mars	3.110e+00
SubthemeLion Knights	8.367e+00
SubthemeLittle Forest Friends	-3.541e+00
SubthemeLogic	2.274e+01
SubthemeM-Tron	8.487e+00
SubthemeMaersk	2.918e+01
SubthemeMaintenance	3.120e-01
SubthemeMan of Steel	-4.067e+00
SubthemeMars Mission	-5.629e+00
SubthemeMatoran	1.053e+01
SubthemeMedical	-1.585e+00
SubthemeMicro World	-1.371e+01

SubthemeMicroFighters	2.529e+00
SubthemeMindstorms	4.710e+01
SubthemeMini building set	4.452e+00
SubthemeMini Building Set	7.328e+00
SubthemeMinifig Pack	5.175e+00
SubthemeMinifig-scale	NA
SubthemeMinifigure collection	7.424e-01
SubthemeMining	2.337e+00
SubthemeMiscellaneous	1.018e+01
SubthemeMission Deep Freeze	-2.185e+00
SubthemeMission Deep Sea	-1.265e+00
SubthemeMistika	1.514e+01
SubthemeModel Maker	NA
SubthemeModular Buildings	-3.966e+01
SubthemeMonorail	4.427e+01
SubthemeMosaic	-8.421e+01
SubthemeMovie	NA
SubthemeMuji	1.504e+01
SubthemeMy Own Creation	-1.351e+01
SubthemeNinja	9.654e+00
SubthemeNXT	1.147e+01
SubthemeNXT 2.0	1.756e+02
SubthemeOrder of the Phoenix	-8.040e+00
SubthemeOrient Expedition	NA
SubthemeOriginal	NA
SubthemeOutback	-3.241e-01
SubthemeOutdoor RC	1.032e+02
SubthemeParadisa	4.250e+00
SubthemePhantoka	1.538e+01
SubthemePhilosopher's Stone	1.043e+01
SubthemePhone game	1.344e+01
SubthemePhoto frames/albums	1.708e+00
SubthemePiraka	1.343e+01
SubthemePirates	1.599e+01
SubthemePlanes	1.188e+01
SubthemePlanet Set	4.541e+00
SubthemePlaysets	4.008e-01
SubthemePolice	1.561e+00
SubthemePolice and Rescue	1.723e-01
SubthemePostal	-5.623e-01
SubthemePower Racers	1.154e+01
SubthemePrincess Castle	1.076e+01
SubthemePrisoner of Azkaban	1.051e+01

SubthemeProduct Collection	1.119e+01
SubthemePromotional	-1.310e+00
SubthemeRace	9.329e-01
SubthemeRacing	-2.126e+00
SubthemeRadio-Control	4.105e+01
SubthemeRahaga	1.010e+01
SubthemeRahi	2.688e+01
SubthemeRahkshi	1.433e+01
SubthemeRaiders of the Lost Ark	-1.039e+01
SubthemeRebels	-3.230e-01
SubthemeRes-Q	1.081e+00
SubthemeRescue	1.775e+01
SubthemeRobo Riders	-2.887e+01
SubthemeRoboForce	3.715e+00
SubthemeRoyal Knights	1.160e+01
SubthemeScala	1.152e+01
SubthemeSculptures	-2.011e+01
SubthemeSeasonal	2.548e+00
SubthemeSeries 01	3.210e+01
SubthemeSeries 02	3.210e+01
SubthemeSeries 03	3.271e+01
SubthemeSeries 04	3.271e+01
SubthemeSeries 05	3.274e+01
SubthemeSeries 06	2.593e+01
SubthemeSeries 07	2.591e+01
SubthemeSeries 08	2.593e+01
SubthemeSeries 09	2.559e+01
SubthemeSeries 1	4.253e-01
SubthemeSeries 10	2.594e+01
SubthemeSeries 11	2.603e+01
SubthemeSeries 12	2.610e+01
SubthemeSeries 13	2.462e+01
SubthemeSeries 2	1.420e-01
SubthemeSeries 3	-1.622e-01
SubthemeSeries 4	4.197e-02
SubthemeSeries 5	NA
SubthemeShell	-4.343e+00
SubthemeShops and Services	-3.468e+00
SubthemeSleeping Beauty	-5.615e+00
SubthemeSlizer	-2.339e+01
SubthemeSpace	8.566e+00
SubthemeSpace Police	5.774e+00
SubthemeSpace Police 2	9.495e+00

SubthemeSpace Police 3	-1.624e-01
SubthemeSpace Port	4.004e+00
SubthemeSpecial	1.747e-02
SubthemeSpeed Racer	4.543e+00
SubthemeSpeed Slammers	-2.807e+01
SubthemeSpeedorz	8.464e+00
SubthemeSpider-Man	1.041e+01
SubthemeSpinners	6.011e+00
SubthemeSpring	-1.535e+00
SubthemeSpyrius	4.192e+00
SubthemeStar Wars	-2.575e+00
SubthemeStars	1.289e+01
SubthemeStingrays	1.053e+01
SubthemeStorage	-1.715e+01
SubthemeSummer	1.756e+00
SubthemeSuperman	-8.089e+00
SubthemeSupplementaries	2.444e+01
SubthemeSupplementary	-5.963e+00
SubthemeSwamp Police	5.693e-01
SubthemeSystem	-1.247e+01
SubthemeTangled	-1.970e+00
SubthemeTeam GB	2.595e+01
SubthemeTechnic	1.263e+01
SubthemeTemple of Doom	NA
SubthemeThanksgiving	3.342e-01
SubthemeThe Battle of the Five Armies	1.324e+01
SubthemeThe Clone Wars	7.647e+00
SubthemeThe Dark Knight Trilogy	-2.686e+00
SubthemeThe Desolation of Smaug	NA
SubthemeThe Fellowship of the Ring	1.341e+01
SubthemeThe LEGO Movie Series	2.523e+01
SubthemeThe Little Mermaid	NA
SubthemeThe Old Republic	5.611e+00
SubthemeThe Return of the King	1.268e+01
SubthemeThe Sands of Time	NA
SubthemeThe Simpsons	2.625e+01
SubthemeThe Simpsons series 2	NA
SubthemeThe Two Towers	NA
SubthemeThomas the Tank Engine	2.569e+00
SubthemeTime Twisters	NA
SubthemeTiny Turbos	5.430e+00
SubthemeToa Hordika	1.321e+01
SubthemeToa Inika	1.361e+01

SubthemeToa Mahri	1.185e+01
SubthemeToa Mata	1.401e+01
SubthemeToa Metru	1.274e+01
SubthemeToa Nuva	1.421e+01
SubthemeTogether	1.288e+01
SubthemeToolo	2.030e+01
SubthemeTown	1.272e+01
SubthemeToy Story	7.727e+00
SubthemeToys R Us	NA
SubthemeTraffic	-4.062e+00
SubthemeTrains	2.191e+01
SubthemeTuraga	1.079e+01
SubthemeUFO	1.124e+01
SubthemeUltimate Collector Series	1.395e+01
SubthemeUltimate Collectors Series	1.604e+01
SubthemeUltimate Spider-Man	-4.928e+00
SubthemeUnitron	4.247e+01
SubthemeUniversal	NA
SubthemeVahki	1.514e+01
SubthemeValentines	NA
SubthemeVehicle	NA
SubthemeVehicles	3.103e+00
SubthemeVehicles/Creatures	1.618e+01
SubthemeVirtual Product Collection	2.764e+01
SubthemeVisorak	1.323e+01
SubthemeWarriors	1.186e+01
SubthemeWestern	1.155e+01
SubthemeWilliams F1	8.373e+00
SubthemeWinnie the Pooh	6.841e-01
SubthemeWinter Village	-2.359e+00
SubthemeWolfpack	1.058e+01
SubthemeX-Men	-3.470e-01
SubthemeX-Pod	-1.210e+01
SubthemeXalax	1.582e+01
SubthemeYoda Chronicles	1.275e+01
SubthemeZoo	8.712e+00
SubthemeZooters	NA
PackagingBox:AvailabilityLEGOLAND exclusive	NA
PackagingBox with backing card:AvailabilityLEGOLAND exclusive	NA
PackagingBucket:AvailabilityLEGOLAND exclusive	NA
PackagingCanister:AvailabilityLEGOLAND exclusive	NA
PackagingFoil pack:AvailabilityLEGOLAND exclusive	NA
PackagingNot specified:AvailabilityLEGOLAND exclusive	NA

PackagingOther:AvailabilityLEGOLAND exclusive	NA
PackagingPlastic box:AvailabilityLEGOLAND exclusive	NA
PackagingPolybag:AvailabilityLEGOLAND exclusive	NA
PackagingShrink-wrapped:AvailabilityLEGOLAND exclusive	NA
PackagingTag:AvailabilityLEGOLAND exclusive	NA
PackagingBox:AvailabilityNot specified	-1.234e+01
PackagingBox with backing card:AvailabilityNot specified	NA
PackagingBucket:AvailabilityNot specified	NA
PackagingCanister:AvailabilityNot specified	NA
PackagingFoil pack:AvailabilityNot specified	-8.404e+00
PackagingNot specified:AvailabilityNot specified	-1.258e+01
PackagingOther:AvailabilityNot specified	NA
PackagingPlastic box:AvailabilityNot specified	7.024e+01
PackagingPolybag:AvailabilityNot specified	NA
PackagingShrink-wrapped:AvailabilityNot specified	NA
PackagingTag:AvailabilityNot specified	NA
PackagingBox:AvailabilityPromotional	-3.384e+00
PackagingBox with backing card:AvailabilityPromotional	NA
PackagingBucket:AvailabilityPromotional	NA
PackagingCanister:AvailabilityPromotional	NA
PackagingFoil pack:AvailabilityPromotional	NA
PackagingNot specified:AvailabilityPromotional	NA
PackagingOther:AvailabilityPromotional	6.108e+01
PackagingPlastic box:AvailabilityPromotional	NA
PackagingPolybag:AvailabilityPromotional	NA
PackagingShrink-wrapped:AvailabilityPromotional	NA
PackagingTag:AvailabilityPromotional	NA
PackagingBox:AvailabilityPromotional (Airline)	1.108e+01
PackagingBox with backing card:AvailabilityPromotional (Airline)	NA
PackagingBucket:AvailabilityPromotional (Airline)	NA
PackagingCanister:AvailabilityPromotional (Airline)	NA
PackagingFoil pack:AvailabilityPromotional (Airline)	NA
PackagingNot specified:AvailabilityPromotional (Airline)	NA
PackagingOther:AvailabilityPromotional (Airline)	NA
PackagingPlastic box:AvailabilityPromotional (Airline)	NA
PackagingPolybag:AvailabilityPromotional (Airline)	NA
PackagingShrink-wrapped:AvailabilityPromotional (Airline)	NA
PackagingTag:AvailabilityPromotional (Airline)	NA
PackagingBox:AvailabilityRetail	1.898e+00
PackagingBox with backing card:AvailabilityRetail	4.650e+01
PackagingBucket:AvailabilityRetail	NA
PackagingCanister:AvailabilityRetail	NA
PackagingFoil pack:AvailabilityRetail	NA

PackagingNot specified:AvailabilityRetail	NA
PackagingOther:AvailabilityRetail	4.167e+01
PackagingPlastic box:AvailabilityRetail	NA
PackagingPolybag:AvailabilityRetail	2.439e+00
PackagingShrink-wrapped:AvailabilityRetail	NA
PackagingTag:AvailabilityRetail	NA
PackagingBox:AvailabilityRetail - limited	-4.546e+01
PackagingBox with backing card:AvailabilityRetail - limited	NA
PackagingBucket:AvailabilityRetail - limited	NA
PackagingCanister:AvailabilityRetail - limited	NA
PackagingFoil pack:AvailabilityRetail - limited	NA
PackagingNot specified:AvailabilityRetail - limited	NA
PackagingOther:AvailabilityRetail - limited	NA
PackagingPlastic box:AvailabilityRetail - limited	NA
PackagingPolybag:AvailabilityRetail - limited	-3.934e+01
PackagingShrink-wrapped:AvailabilityRetail - limited	NA
PackagingTag:AvailabilityRetail - limited	NA
PackagingBox:AvailabilityUnknown	-1.764e+00
PackagingBox with backing card:AvailabilityUnknown	NA
PackagingBucket:AvailabilityUnknown	NA
PackagingCanister:AvailabilityUnknown	NA
PackagingFoil pack:AvailabilityUnknown	NA
PackagingNot specified:AvailabilityUnknown	NA
PackagingOther:AvailabilityUnknown	NA
PackagingPlastic box:AvailabilityUnknown	NA
PackagingPolybag:AvailabilityUnknown	NA
PackagingShrink-wrapped:AvailabilityUnknown	NA
PackagingTag:AvailabilityUnknown	NA
	Std. Error
(Intercept)	1.945e+02
Year	9.695e-02
Pieces	1.367e-03
Minifigures	1.743e-01
PackagingBox	5.389e+00
PackagingBox with backing card	2.054e+01
PackagingBucket	1.554e+01
PackagingCanister	5.477e+00
PackagingFoil pack	6.301e+00
PackagingNot specified	9.078e+00
PackagingOther	9.008e+00
PackagingPlastic box	1.924e+01
PackagingPolybag	5.896e+00
PackagingShrink-wrapped	5.923e+00

PackagingTag	8.538e+00
AvailabilityLEGOLAND exclusive	1.813e+01
AvailabilityNot specified	5.735e+00
AvailabilityPromotional	4.103e+00
AvailabilityPromotional (Airline)	1.867e+01
AvailabilityRetail	6.388e+00
AvailabilityRetail - limited	1.244e+01
AvailabilityUnknown	1.107e+01
ThemeAdvanced Models	7.289e+00
ThemeAdventurers	1.084e+01
ThemeAlpha Team	1.612e+01
ThemeAquazone	1.589e+01
ThemeArchitecture	1.094e+01
ThemeAssorted	1.143e+01
ThemeBaby	1.314e+01
ThemeBasic	8.052e+00
ThemeBelville	1.596e+01
ThemeBen 10	1.174e+01
ThemeBionicle	6.543e+00
ThemeBricks and More	1.609e+01
ThemeBulk Bricks	7.084e+00
ThemeCastle	6.890e+00
ThemeCity	5.181e+00
ThemeClikits	1.203e+01
ThemeCollectable Minifigures	1.894e+01
ThemeCreator	7.617e+00
ThemeDacta	7.187e+00
ThemeDC Comics Super Heroes	1.941e+01
ThemeDisney Princess	1.335e+01
ThemeDuplo	5.156e+00
ThemeEducation	1.026e+01
ThemeExo-Force	1.084e+01
ThemeExplore	1.044e+01
ThemeFactory	9.435e+00
ThemeFriends	8.451e+00
ThemeGames	1.193e+01
ThemeHarry Potter	8.564e+00
ThemeIndiana Jones	1.462e+01
ThemeJuniors	1.573e+01
ThemeLegends of Chima	1.620e+01
ThemeLEGOLAND	1.796e+01
ThemeMarvel Super Heroes	1.941e+01
ThemeMindstorms	1.075e+01

ThemeMinecraft	1.195e+01
ThemeMiscellaneous	1.608e+01
ThemeMixels	1.242e+01
ThemeMonster Fighters	1.528e+01
ThemeNinjago	1.513e+01
ThemePirates	9.665e+00
ThemePower Functions	6.843e+00
ThemePrince of Persia	1.216e+01
ThemePromotional	1.269e+01
ThemeRacers	1.033e+01
ThemeSamsonite	1.932e+01
ThemeSeasonal	1.181e+01
ThemeService Packs	6.389e+00
ThemeSpace	8.215e+00
ThemeSports	1.228e+01
ThemeStar Wars	6.315e+00
ThemeStudios	1.360e+01
ThemeTechnic	1.180e+01
ThemeTeenage Mutant Ninja Turtles	1.336e+01
ThemeThe Hobbit	1.167e+01
ThemeThe Lord of the Rings	1.266e+01
ThemeTime Cruisers	1.253e+01
ThemeTown	4.884e+00
ThemeTrains	1.613e+01
ThemeWestern	1.179e+01
ThemeWorld City	7.260e+00
Subtheme1.5	7.358e+00
Subtheme2.0	1.536e+01
Subtheme4.5/12 V	1.897e+01
Subtheme9 V	1.782e+01
SubthemeAccessories	9.490e+00
SubthemeAdventurers	1.409e+01
SubthemeAge of Ultron	2.142e+01
SubthemeAgori	1.172e+01
SubthemeAircraft	1.217e+01
SubthemeAirjitzu	1.909e+01
SubthemeAirport	9.577e+00
SubthemeAladdin	1.710e+01
SubthemeAlien Conquest	1.243e+01
SubthemeAlien Force	NA
SubthemeAn Unexpected Journey	8.009e+00
SubthemeAnimals series 1	1.503e+01
SubthemeAnimals series 2	1.846e+01

SubthemeAnimals series 3	1.503e+01
SubthemeAnimals series 4	1.503e+01
SubthemeAnimals series 5	1.453e+01
SubthemeAquanauts	1.846e+01
SubthemeAquaraiders	1.961e+01
SubthemeAquasharks	1.908e+01
SubthemeAquazone	1.393e+01
SubthemeArchitect Series	6.518e+00
SubthemeArctic	9.828e+00
SubthemeAvengers	2.141e+01
SubthemeAvengers Assemble	2.317e+01
SubthemeBaby	1.358e+01
SubthemeBarraki	1.171e+01
SubthemeBasic	1.710e+01
SubthemeBasketball	1.468e+01
SubthemeBatman	2.101e+01
SubthemeBattle Figures	1.227e+01
SubthemeBattle Pack	1.271e+01
SubthemeBattle Vehicles	1.248e+01
SubthemeBeing Me	1.293e+01
SubthemeBelville	1.743e+01
SubthemeBirthday	1.599e+01
SubthemeBlack Falcons	1.184e+01
SubthemeBlack Knights	1.144e+01
SubthemeBlacktron	1.855e+01
SubthemeBlacktron 2	1.294e+01
SubthemeBoats	1.067e+01
SubthemeBob the Builder	9.095e+00
SubthemeBohrok	1.170e+01
SubthemeBohrok Va	1.170e+01
SubthemeBohrok-Kal	1.170e+01
SubthemeBonus/Value Pack	1.085e+01
SubthemeBooster pack	1.792e+01
SubthemeBrave	1.710e+01
SubthemeBuildings	1.323e+01
SubthemeCargo	1.057e+01
SubthemeCars	9.477e+00
SubthemeCastle	9.381e+00
SubthemeChamber of Secrets	1.206e+01
SubthemeChristmas	6.187e+00
SubthemeCinderella	1.352e+01
SubthemeCircus	1.222e+01
SubthemeCity	9.437e+00

SubthemeClassic	1.114e+01
SubthemeCoast Guard	9.866e+00
SubthemeCoastguard	1.125e+01
SubthemeCombi-pack	1.795e+01
SubthemeCompetition	7.729e+00
SubthemeConstraction	1.880e+01
SubthemeConstruction	9.219e+00
SubthemeCowboys	7.408e+00
SubthemeCrusaders	1.331e+01
SubthemeCube Dudes	1.322e+01
SubthemeCustom Cars	1.901e+01
SubthemeDark Forest	1.334e+01
SubthemeDeathly Hallows	1.535e+01
SubthemeDeep Jungle	6.955e+00
SubthemeDeep Sea Explorers	1.085e+01
SubthemeDesert	5.454e+00
SubthemeDesigner Set	1.102e+01
SubthemeDesk accessory	1.981e+01
SubthemeDino	1.211e+01
SubthemeDino Island	5.786e+00
SubthemeDisney	2.286e+01
SubthemeDisney Planes	1.222e+01
SubthemeDisney Princess	1.018e+01
SubthemeDisney's Baby Mickey	NA
SubthemeDivers	1.003e+01
SubthemeDolls	1.047e+01
SubthemeDora the Explorer	1.451e+01
SubthemeDragon Knights	1.122e+01
SubthemeDrome Racers	1.260e+01
SubthemeDuplo	1.186e+01
SubthemeEaster	7.053e+00
SubthemeEmergency	1.743e+01
SubthemeEpisode I	1.004e+01
SubthemeEpisode II	1.034e+01
SubthemeEpisode III	1.003e+01
SubthemeEpisode IV-VI	9.798e+00
SubthemeEpisode V	1.771e+01
SubthemeEpisode VII	1.122e+01
SubthemeEV3	6.641e+00
SubthemeExpanded Universe	1.077e+01
SubthemeExplore	1.945e+01
SubthemeExploriens	1.228e+01
SubthemeExtreme Team	1.017e+01

SubthemeFairground	1.343e+01
SubthemeFairy-Tale	1.800e+01
SubthemeFairytale	1.961e+01
SubthemeFall	1.586e+01
SubthemeFantasy Era	1.089e+01
SubthemeFarm	9.517e+00
SubthemeFerrari	1.224e+01
SubthemeFire	9.186e+00
SubthemeFlight	9.777e+00
SubthemeFootball	1.464e+01
SubthemeForest Animals	1.147e+01
SubthemeForest Fire	1.119e+01
SubthemeForest Police	1.026e+01
SubthemeForestmen	1.259e+01
SubthemeFright Knights	1.114e+01
SubthemeFrozen	1.710e+01
SubthemeFuturon	1.402e+01
SubthemeGalaxy Squad	1.207e+01
SubthemeGeneral	1.050e+01
SubthemeGladiator	1.172e+01
SubthemeGladiator Legends	1.172e+01
SubthemeGoblet of Fire	1.343e+01
SubthemeGolden City	6.076e+00
SubthemeGravity Games	1.576e+01
SubthemeGuardians of the Galaxy	2.172e+01
SubthemeHalf-Blood Prince	1.857e+01
SubthemeHalloween	7.296e+00
SubthemeHarbour	1.038e+01
SubthemeHeroica	NA
SubthemeHockey	1.498e+01
SubthemeHoliday	1.355e+01
SubthemeHydronauts	1.880e+01
SubthemeIce Planet 2002	1.244e+01
SubthemeImagination	1.282e+01
SubthemeImperial Armada	1.495e+01
SubthemeImperial Guards	1.334e+01
SubthemeIndians	NA
SubthemeInsectoids	1.200e+01
SubthemeInventor Set	1.291e+01
SubthemeIron Man 3	2.237e+01
SubthemeIslanders	1.348e+01
SubthemeJake and the Never Land Pirates	1.096e+01
SubthemeJungle	6.805e+00

SubthemeJungle Rescue	1.302e+01
SubthemeJurassic Park III	1.982e+01
SubthemeJustice League	2.171e+01
SubthemeKingdom of the Crystal Skull	1.188e+01
SubthemeKingdoms	1.099e+01
SubthemeKnights' Kingdom I	1.083e+01
SubthemeKnights' Kingdom II	1.054e+01
SubthemeLamborghini	1.626e+01
SubthemeLandmark series	1.531e+01
SubthemeLandmark Series	NA
SubthemeLarge Vehicle	2.099e+01
SubthemeLast Crusade	1.352e+01
SubthemeLaunch Command	1.125e+01
SubthemeLegend Beasts	1.896e+01
SubthemeLEGO brand store opening set	1.686e+01
SubthemeLEGO brand stores	1.823e+01
SubthemeLEGO Universe	2.330e+01
SubthemeLEGO Ville	8.768e+00
SubthemeLeisure	1.004e+01
SubthemeLife On Mars	1.199e+01
SubthemeLion Knights	1.084e+01
SubthemeLittle Forest Friends	1.210e+01
SubthemeLogic	1.305e+01
SubthemeM-Tron	1.243e+01
SubthemeMaersk	1.333e+01
SubthemeMaintenance	1.048e+01
SubthemeMan of Steel	2.237e+01
SubthemeMars Mission	1.180e+01
SubthemeMatoran	1.038e+01
SubthemeMedical	9.996e+00
SubthemeMicro World	1.054e+01
SubthemeMicroFighters	1.055e+01
SubthemeMindstorms	1.434e+01
SubthemeMini building set	1.313e+01
SubthemeMini Building Set	1.026e+01
SubthemeMinifig Pack	1.186e+01
SubthemeMinifig-scale	NA
SubthemeMinifigure collection	1.907e+01
SubthemeMining	1.060e+01
SubthemeMiscellaneous	1.242e+01
SubthemeMission Deep Freeze	1.848e+01
SubthemeMission Deep Sea	1.821e+01
SubthemeMistika	1.171e+01

SubthemeModel Maker	NA
SubthemeModular Buildings	1.107e+01
SubthemeMonorail	1.387e+01
SubthemeMosaic	1.334e+01
SubthemeMovie	NA
SubthemeMuji	2.000e+01
SubthemeMy Own Creation	1.808e+01
SubthemeNinja	1.073e+01
SubthemeNXT	4.976e+00
SubthemeNXT 2.0	1.538e+01
SubthemeOrder of the Phoenix	1.858e+01
SubthemeOrient Expedition	NA
SubthemeOriginal	NA
SubthemeOutback	1.128e+01
SubthemeOutdoor RC	1.445e+01
SubthemeParadisa	9.871e+00
SubthemePhantoka	1.171e+01
SubthemePhilosopher's Stone	1.189e+01
SubthemePhone game	2.081e+01
SubthemePhoto frames/albums	2.071e+01
SubthemePiraka	1.171e+01
SubthemePirates	9.964e+00
SubthemePlanes	1.714e+01
SubthemePlanet Set	1.071e+01
SubthemePlaysets	1.109e+01
SubthemePolice	9.162e+00
SubthemePolice and Rescue	1.105e+01
SubthemePostal	1.739e+01
SubthemePower Racers	1.267e+01
SubthemePrincess Castle	1.048e+01
SubthemePrisoner of Azkaban	1.206e+01
SubthemeProduct Collection	9.730e+00
SubthemePromotional	1.327e+01
SubthemeRace	1.054e+01
SubthemeRacing	9.716e+00
SubthemeRadio-Control	1.933e+01
SubthemeRahaga	1.170e+01
SubthemeRahi	1.201e+01
SubthemeRahkshi	1.170e+01
SubthemeRaiders of the Lost Ark	1.239e+01
SubthemeRebels	1.104e+01
SubthemeRes-Q	1.038e+01
SubthemeRescue	1.386e+01

SubthemeRobo Riders	8.958e+00
SubthemeRoboForce	1.339e+01
SubthemeRoyal Knights	1.161e+01
SubthemeScala	1.744e+01
SubthemeSculptures	1.341e+01
SubthemeSeasonal	9.557e+00
SubthemeSeries 01	1.639e+01
SubthemeSeries 02	1.639e+01
SubthemeSeries 03	1.639e+01
SubthemeSeries 04	1.639e+01
SubthemeSeries 05	1.639e+01
SubthemeSeries 06	1.548e+01
SubthemeSeries 07	1.548e+01
SubthemeSeries 08	1.548e+01
SubthemeSeries 09	1.547e+01
SubthemeSeries 1	6.980e+00
SubthemeSeries 10	1.545e+01
SubthemeSeries 11	1.547e+01
SubthemeSeries 12	1.548e+01
SubthemeSeries 13	1.541e+01
SubthemeSeries 2	6.980e+00
SubthemeSeries 3	6.980e+00
SubthemeSeries 4	6.979e+00
SubthemeSeries 5	NA
SubthemeShell	1.164e+01
SubthemeShops and Services	9.880e+00
SubthemeSleeping Beauty	1.710e+01
SubthemeSlizer	7.402e+00
SubthemeSpace	9.768e+00
SubthemeSpace Police	1.265e+01
SubthemeSpace Police 2	1.264e+01
SubthemeSpace Police 3	1.185e+01
SubthemeSpace Port	9.807e+00
SubthemeSpecial	1.085e+01
SubthemeSpeed Racer	1.447e+01
SubthemeSpeed Slammers	8.635e+00
SubthemeSpeedorz	1.844e+01
SubthemeSpider-Man	1.449e+01
SubthemeSpinners	1.719e+01
SubthemeSpring	1.586e+01
SubthemeSpyrius	1.293e+01
SubthemeStar Wars	1.122e+01
SubthemeStars	1.173e+01

SubthemeStingrays	1.880e+01
SubthemeStorage	1.801e+01
SubthemeSummer	1.585e+01
SubthemeSuperman	2.542e+01
SubthemeSupplementaries	1.127e+01
SubthemeSupplementary	9.615e+00
SubthemeSwamp Police	1.042e+01
SubthemeSystem	1.802e+01
SubthemeTangled	1.357e+01
SubthemeTeam GB	1.582e+01
SubthemeTechnic	9.289e+00
SubthemeTemple of Doom	NA
SubthemeThanksgiving	8.693e+00
SubthemeThe Battle of the Five Armies	9.287e+00
SubthemeThe Clone Wars	9.894e+00
SubthemeThe Dark Knight Trilogy	2.318e+01
SubthemeThe Desolation of Smaug	NA
SubthemeThe Fellowship of the Ring	9.346e+00
SubthemeThe LEGO Movie Series	1.548e+01
SubthemeThe Little Mermaid	NA
SubthemeThe Old Republic	1.220e+01
SubthemeThe Return of the King	1.139e+01
SubthemeThe Sands of Time	NA
SubthemeThe Simpsons	1.548e+01
SubthemeThe Simpsons series 2	NA
SubthemeThe Two Towers	NA
SubthemeThomas the Tank Engine	9.536e+00
SubthemeTime Twisters	NA
SubthemeTiny Turbos	1.281e+01
SubthemeToa Hordika	1.170e+01
SubthemeToa Inika	1.171e+01
SubthemeToa Mahri	1.171e+01
SubthemeToa Mata	1.170e+01
SubthemeToa Metru	1.170e+01
SubthemeToa Nuva	1.170e+01
SubthemeTogether	1.314e+01
SubthemeToolo	1.032e+01
SubthemeTown	1.057e+01
SubthemeToy Story	1.135e+01
SubthemeToys R Us	NA
SubthemeTraffic	9.223e+00
SubthemeTrains	8.868e+00
SubthemeTuraga	1.170e+01

SubthemeUF0	1.199e+01
SubthemeUltimate Collector Series	1.032e+01
SubthemeUltimate Collectors Series	2.545e+01
SubthemeUltimate Spider-Man	2.141e+01
SubthemeUnitron	1.403e+01
SubthemeUniversal	NA
SubthemeVahki	1.170e+01
SubthemeValentines	NA
SubthemeVehicle	NA
SubthemeVehicles	9.534e+00
SubthemeVehicles/Creatures	1.150e+01
SubthemeVirtual Product Collection	1.255e+01
SubthemeVisorak	1.170e+01
SubthemeWarriors	1.032e+01
SubthemeWestern	1.743e+01
SubthemeWilliams F1	1.624e+01
SubthemeWinnie the Pooh	9.650e+00
SubthemeWinter Village	1.170e+01
SubthemeWolfpack	1.328e+01
SubthemeX-Men	2.317e+01
SubthemeX-Pod	1.185e+01
SubthemeXalax	1.302e+01
SubthemeYoda Chronicles	1.428e+01
SubthemeZoo	1.015e+01
SubthemeZooters	NA
PackagingBox:AvailabilityLEGOLAND exclusive	NA
PackagingBox with backing card:AvailabilityLEGOLAND exclusive	NA
PackagingBucket:AvailabilityLEGOLAND exclusive	NA
PackagingCanister:AvailabilityLEGOLAND exclusive	NA
PackagingFoil pack:AvailabilityLEGOLAND exclusive	NA
PackagingNot specified:AvailabilityLEGOLAND exclusive	NA
PackagingOther:AvailabilityLEGOLAND exclusive	NA
PackagingPlastic box:AvailabilityLEGOLAND exclusive	NA
PackagingPolybag:AvailabilityLEGOLAND exclusive	NA
PackagingShrink-wrapped:AvailabilityLEGOLAND exclusive	NA
PackagingTag:AvailabilityLEGOLAND exclusive	NA
PackagingBox:AvailabilityNot specified	8.968e+00
PackagingBox with backing card:AvailabilityNot specified	NA
PackagingBucket:AvailabilityNot specified	NA
PackagingCanister:AvailabilityNot specified	NA
PackagingFoil pack:AvailabilityNot specified	1.373e+01
PackagingNot specified:AvailabilityNot specified	9.094e+00
PackagingOther:AvailabilityNot specified	NA

PackagingPlastic box:AvailabilityNot specified	2.257e+01
PackagingPolybag:AvailabilityNot specified	NA
PackagingShrink-wrapped:AvailabilityNot specified	NA
PackagingTag:AvailabilityNot specified	NA
PackagingBox:AvailabilityPromotional	5.127e+00
PackagingBox with backing card:AvailabilityPromotional	NA
PackagingBucket:AvailabilityPromotional	NA
PackagingCanister:AvailabilityPromotional	NA
PackagingFoil pack:AvailabilityPromotional	NA
PackagingNot specified:AvailabilityPromotional	NA
PackagingOther:AvailabilityPromotional	1.737e+01
PackagingPlastic box:AvailabilityPromotional	NA
PackagingPolybag:AvailabilityPromotional	NA
PackagingShrink-wrapped:AvailabilityPromotional	NA
PackagingTag:AvailabilityPromotional	NA
PackagingBox:AvailabilityPromotional (Airline)	1.984e+01
PackagingBox with backing card:AvailabilityPromotional (Airline)	NA
PackagingBucket:AvailabilityPromotional (Airline)	NA
PackagingCanister:AvailabilityPromotional (Airline)	NA
PackagingFoil pack:AvailabilityPromotional (Airline)	NA
PackagingNot specified:AvailabilityPromotional (Airline)	NA
PackagingOther:AvailabilityPromotional (Airline)	NA
PackagingPlastic box:AvailabilityPromotional (Airline)	NA
PackagingPolybag:AvailabilityPromotional (Airline)	NA
PackagingShrink-wrapped:AvailabilityPromotional (Airline)	NA
PackagingTag:AvailabilityPromotional (Airline)	NA
PackagingBox:AvailabilityRetail	6.644e+00
PackagingBox with backing card:AvailabilityRetail	2.138e+01
PackagingBucket:AvailabilityRetail	NA
PackagingCanister:AvailabilityRetail	NA
PackagingFoil pack:AvailabilityRetail	NA
PackagingNot specified:AvailabilityRetail	NA
PackagingOther:AvailabilityRetail	1.129e+01
PackagingPlastic box:AvailabilityRetail	NA
PackagingPolybag:AvailabilityRetail	1.057e+01
PackagingShrink-wrapped:AvailabilityRetail	NA
PackagingTag:AvailabilityRetail	NA
PackagingBox:AvailabilityRetail - limited	1.259e+01
PackagingBox with backing card:AvailabilityRetail - limited	NA
PackagingBucket:AvailabilityRetail - limited	NA
PackagingCanister:AvailabilityRetail - limited	NA
PackagingFoil pack:AvailabilityRetail - limited	NA
PackagingNot specified:AvailabilityRetail - limited	NA

PackagingOther:AvailabilityRetail - limited	NA
PackagingPlastic box:AvailabilityRetail - limited	NA
PackagingPolybag:AvailabilityRetail - limited	1.301e+01
PackagingShrink-wrapped:AvailabilityRetail - limited	NA
PackagingTag:AvailabilityRetail - limited	NA
PackagingBox:AvailabilityUnknown	1.935e+01
PackagingBox with backing card:AvailabilityUnknown	NA
PackagingBucket:AvailabilityUnknown	NA
PackagingCanister:AvailabilityUnknown	NA
PackagingFoil pack:AvailabilityUnknown	NA
PackagingNot specified:AvailabilityUnknown	NA
PackagingOther:AvailabilityUnknown	NA
PackagingPlastic box:AvailabilityUnknown	NA
PackagingPolybag:AvailabilityUnknown	NA
PackagingShrink-wrapped:AvailabilityUnknown	NA
PackagingTag:AvailabilityUnknown	NA
	t value
(Intercept)	-4.267
Year	4.279
Pieces	69.071
Minifigures	10.087
PackagingBox	0.250
PackagingBox with backing card	-2.292
PackagingBucket	0.140
PackagingCanister	1.503
PackagingFoil pack	0.792
PackagingNot specified	0.144
PackagingOther	-3.753
PackagingPlastic box	-2.053
PackagingPolybag	-1.109
PackagingShrink-wrapped	1.093
PackagingTag	-0.134
AvailabilityLEGOLAND exclusive	-0.223
AvailabilityNot specified	1.425
AvailabilityPromotional	1.026
AvailabilityPromotional (Airline)	-0.525
AvailabilityRetail	-0.275
AvailabilityRetail - limited	3.500
AvailabilityUnknown	-0.405
ThemeAdvanced Models	-3.975
ThemeAdventurers	-0.123
ThemeAlpha Team	0.072
ThemeAquazone	-0.286

ThemeArchitecture	0.082
ThemeAssorted	-0.162
ThemeBaby	1.107
ThemeBasic	-1.345
ThemeBelville	-0.137
ThemeBen 10	1.074
ThemeBionicle	-1.107
ThemeBricks and More	-0.303
ThemeBulk Bricks	-0.480
ThemeCastle	-1.474
ThemeCity	-0.337
ThemeClikits	0.821
ThemeCollectable Minifigures	-1.749
ThemeCreator	0.430
ThemeDacta	4.374
ThemeDC Comics Super Heroes	-0.141
ThemeDisney Princess	0.041
ThemeDuplo	2.530
ThemeEducation	3.794
ThemeExo-Force	-1.067
ThemeExplore	0.210
ThemeFactory	-0.992
ThemeFriends	-0.003
ThemeGames	-1.144
ThemeHarry Potter	-1.255
ThemeIndiana Jones	0.224
ThemeJuniors	-1.407
ThemeLegends of Chima	-0.471
ThemeLEGOLAND	1.401
ThemeMarvel Super Heroes	-0.128
ThemeMindstorms	4.255
ThemeMinecraft	-0.271
ThemeMiscellaneous	0.089
ThemeMixels	-0.765
ThemeMonster Fighters	-0.143
ThemeNinjago	-0.097
ThemePirates	-1.837
ThemePower Functions	1.903
ThemePrince of Persia	-0.748
ThemePromotional	-0.036
ThemeRacers	-1.403
ThemeSamsonite	0.040
ThemeSeasonal	-0.057

ThemeService Packs	-0.235
ThemeSpace	-0.396
ThemeSports	0.801
ThemeStar Wars	-1.300
ThemeStudios	-0.887
ThemeTechnic	2.181
ThemeTeenage Mutant Ninja Turtles	-0.678
ThemeThe Hobbit	-0.983
ThemeThe Lord of the Rings	-1.379
ThemeTime Cruisers	0.228
ThemeTown	-0.105
ThemeTrains	0.668
ThemeWestern	0.661
ThemeWorld City	-0.334
Subtheme1.5	2.539
Subtheme2.0	5.842
Subtheme4.5/12 V	0.169
Subtheme9 V	0.402
SubthemeAccessories	0.580
SubthemeAdventurers	2.581
SubthemeAge of Ultron	-0.135
SubthemeAgori	1.082
SubthemeAircraft	1.669
SubthemeAirjitzu	0.123
SubthemeAirport	0.487
SubthemeAladdin	-0.179
SubthemeAlien Conquest	0.010
SubthemeAlien Force	NA
SubthemeAn Unexpected Journey	1.423
SubthemeAnimals series 1	-0.429
SubthemeAnimals series 2	-0.452
SubthemeAnimals series 3	-0.431
SubthemeAnimals series 4	-0.577
SubthemeAnimals series 5	-0.413
SubthemeAquanauts	0.668
SubthemeAquaraiders	0.733
SubthemeAquasharks	0.716
SubthemeAquazone	0.841
SubthemeArchitect Series	1.097
SubthemeArctic	0.549
SubthemeAvengers	0.114
SubthemeAvengers Assemble	-0.142
SubthemeBaby	0.551

SubthemeBarraki	1.094
SubthemeBasic	-1.581
SubthemeBasketball	-0.707
SubthemeBatman	-0.241
SubthemeBattle Figures	1.652
SubthemeBattle Pack	0.996
SubthemeBattle Vehicles	1.363
SubthemeBeing Me	0.605
SubthemeBelville	0.667
SubthemeBirthday	-0.235
SubthemeBlack Falcons	0.190
SubthemeBlack Knights	0.786
SubthemeBlacktron	0.356
SubthemeBlacktron 2	0.966
SubthemeBoats	0.209
SubthemeBob the Builder	0.278
SubthemeBohrok	1.207
SubthemeBohrok Va	0.893
SubthemeBohrok-Kal	1.171
SubthemeBonus/Value Pack	0.408
SubthemeBooster pack	-0.185
SubthemeBrave	-0.165
SubthemeBuildings	-7.705
SubthemeCargo	0.091
SubthemeCars	1.157
SubthemeCastle	1.112
SubthemeChamber of Secrets	0.618
SubthemeChristmas	0.388
SubthemeCinderella	-0.255
SubthemeCircus	-0.170
SubthemeCity	0.764
SubthemeClassic	0.777
SubthemeCoast Guard	0.108
SubthemeCoastguard	0.206
SubthemeCombi-pack	1.751
SubthemeCompetition	-1.342
SubthemeConstraction	0.398
SubthemeConstruction	0.274
SubthemeCowboys	-0.634
SubthemeCrusaders	1.024
SubthemeCube Dudes	2.009
SubthemeCustom Cars	-0.618
SubthemeDark Forest	0.616

SubthemeDeathly Hallows	0.096
SubthemeDeep Jungle	0.771
SubthemeDeep Sea Explorers	0.582
SubthemeDesert	-0.349
SubthemeDesigner Set	-1.835
SubthemeDesk accessory	-0.430
SubthemeDino	0.941
SubthemeDino Island	0.580
SubthemeDisney	0.476
SubthemeDisney Planes	0.309
SubthemeDisney Princess	0.113
SubthemeDisney's Baby Mickey	NA
SubthemeDivers	0.621
SubthemeDolls	0.225
SubthemeDora the Explorer	0.844
SubthemeDragon Knights	1.373
SubthemeDrome Racers	1.951
SubthemeDuplo	0.941
SubthemeEaster	-0.009
SubthemeEmergency	-0.224
SubthemeEpisode I	0.042
SubthemeEpisode II	0.448
SubthemeEpisode III	0.295
SubthemeEpisode IV-VI	0.605
SubthemeEpisode V	1.595
SubthemeEpisode VII	1.333
SubthemeEV3	3.039
SubthemeExpanded Universe	0.472
SubthemeExplore	1.565
SubthemeExploriens	0.449
SubthemeExtreme Team	-0.015
SubthemeFairground	-2.132
SubthemeFairy-Tale	0.854
SubthemeFairytale	1.558
SubthemeFall	-0.112
SubthemeFantasy Era	0.694
SubthemeFarm	0.391
SubthemeFerrari	0.540
SubthemeFire	0.141
SubthemeFlight	-0.118
SubthemeFootball	-0.852
SubthemeForest Animals	0.042
SubthemeForest Fire	-0.324

SubthemeForest Police	-0.066
SubthemeForestmen	0.741
SubthemeFright Knights	1.025
SubthemeFrozen	-0.037
SubthemeFuturon	1.277
SubthemeGalaxy Squad	0.010
SubthemeGeneral	-0.749
SubthemeGlatorian	1.286
SubthemeGlatorian Legends	1.298
SubthemeGoblet of Fire	-0.302
SubthemeGolden City	1.107
SubthemeGravity Games	-0.152
SubthemeGuardians of the Galaxy	0.002
SubthemeHalf-Blood Prince	0.075
SubthemeHalloween	-0.026
SubthemeHarbour	0.909
SubthemeHeroica	NA
SubthemeHockey	-0.708
SubthemeHoliday	0.209
SubthemeHydronauts	0.866
SubthemeIce Planet 2002	0.637
SubthemeImagination	1.200
SubthemeImperial Armada	1.567
SubthemeImperial Guards	1.718
SubthemeIndians	NA
SubthemeInsectoids	0.848
SubthemeInventor Set	-0.039
SubthemeIron Man 3	-0.265
SubthemeIslanders	1.727
SubthemeJake and the Never Land Pirates	0.087
SubthemeJungle	0.625
SubthemeJungle Rescue	-0.501
SubthemeJurassic Park III	0.959
SubthemeJustice League	-0.095
SubthemeKingdom of the Crystal Skull	-1.145
SubthemeKingdoms	0.499
SubthemeKnights' Kingdom I	1.184
SubthemeKnights' Kingdom II	1.152
SubthemeLamborghini	-0.201
SubthemeLandmark series	-1.614
SubthemeLandmark Series	NA
SubthemeLarge Vehicle	-0.223
SubthemeLast Crusade	-0.607

SubthemeLaunch Command	0.072
SubthemeLegend Beasts	-0.082
SubthemeLEGO brand store opening set	0.045
SubthemeLEGO brand stores	-0.469
SubthemeLEGO Universe	0.087
SubthemeLEGO Ville	1.352
SubthemeLeisure	0.153
SubthemeLife On Mars	0.259
SubthemeLion Knights	0.772
SubthemeLittle Forest Friends	-0.293
SubthemeLogic	1.742
SubthemeM-Tron	0.683
SubthemeMaersk	2.190
SubthemeMaintenance	0.030
SubthemeMan of Steel	-0.182
SubthemeMars Mission	-0.477
SubthemeMatoran	1.015
SubthemeMedical	-0.159
SubthemeMicro World	-1.300
SubthemeMicroFighters	0.240
SubthemeMindstorms	3.285
SubthemeMini building set	0.339
SubthemeMini Building Set	0.714
SubthemeMinifig Pack	0.436
SubthemeMinifig-scale	NA
SubthemeMinifigure collection	0.039
SubthemeMining	0.221
SubthemeMiscellaneous	0.820
SubthemeMission Deep Freeze	-0.118
SubthemeMission Deep Sea	-0.069
SubthemeMistika	1.293
SubthemeModel Maker	NA
SubthemeModular Buildings	-3.584
SubthemeMonorail	3.192
SubthemeMosaic	-6.314
SubthemeMovie	NA
SubthemeMuji	0.752
SubthemeMy Own Creation	-0.748
SubthemeNinja	0.900
SubthemeNXT	2.305
SubthemeNXT 2.0	11.421
SubthemeOrder of the Phoenix	-0.433
SubthemeOrient Expedition	NA

SubthemeOriginal	NA
SubthemeOutback	-0.029
SubthemeOutdoor RC	7.141
SubthemeParadisa	0.431
SubthemePhantoka	1.313
SubthemePhilospher's Stone	0.877
SubthemePhone game	0.646
SubthemePhoto frames/albums	0.082
SubthemePiraka	1.147
SubthemePirates	1.605
SubthemePlanes	0.693
SubthemePlanet Set	0.424
SubthemePlaysets	0.036
SubthemePolice	0.170
SubthemePolice and Rescue	0.016
SubthemePostal	-0.032
SubthemePower Racers	0.911
SubthemePrincess Castle	1.027
SubthemePrisoner of Azkaban	0.872
SubthemeProduct Collection	1.150
SubthemePromotional	-0.099
SubthemeRace	0.089
SubthemeRacing	-0.219
SubthemeRadio-Control	2.123
SubthemeRahaga	0.863
SubthemeRahi	2.238
SubthemeRahkshi	1.225
SubthemeRaiders of the Lost Ark	-0.838
SubthemeRebels	-0.029
SubthemeRes-Q	0.104
SubthemeRescue	1.280
SubthemeRobo Riders	-3.223
SubthemeRoboForce	0.277
SubthemeRoyal Knights	0.999
SubthemeScala	0.661
SubthemeSculptures	-1.499
SubthemeSeasonal	0.267
SubthemeSeries 01	1.958
SubthemeSeries 02	1.958
SubthemeSeries 03	1.996
SubthemeSeries 04	1.996
SubthemeSeries 05	1.997
SubthemeSeries 06	1.675

SubthemeSeries 07	1.673
SubthemeSeries 08	1.674
SubthemeSeries 09	1.654
SubthemeSeries 1	0.061
SubthemeSeries 10	1.679
SubthemeSeries 11	1.683
SubthemeSeries 12	1.685
SubthemeSeries 13	1.598
SubthemeSeries 2	0.020
SubthemeSeries 3	-0.023
SubthemeSeries 4	0.006
SubthemeSeries 5	NA
SubthemeShell	-0.373
SubthemeShops and Services	-0.351
SubthemeSleeping Beauty	-0.328
SubthemeSlizer	-3.160
SubthemeSpace	0.877
SubthemeSpace Police	0.457
SubthemeSpace Police 2	0.751
SubthemeSpace Police 3	-0.014
SubthemeSpace Port	0.408
SubthemeSpecial	0.002
SubthemeSpeed Racer	0.314
SubthemeSpeed Slammers	-3.251
SubthemeSpeedorz	0.459
SubthemeSpider-Man	0.719
SubthemeSpinners	0.350
SubthemeSpring	-0.097
SubthemeSpyrius	0.324
SubthemeStar Wars	-0.229
SubthemeStars	1.099
SubthemeStingrays	0.560
SubthemeStorage	-0.952
SubthemeSummer	0.111
SubthemeSuperman	-0.318
SubthemeSupplementaries	2.169
SubthemeSupplementary	-0.620
SubthemeSwamp Police	0.055
SubthemeSystem	-0.692
SubthemeTangled	-0.145
SubthemeTeam GB	1.640
SubthemeTechnic	1.359
SubthemeTemple of Doom	NA

SubthemeThanksgiving	0.038
SubthemeThe Battle of the Five Armies	1.426
SubthemeThe Clone Wars	0.773
SubthemeThe Dark Knight Trilogy	-0.116
SubthemeThe Desolation of Smaug	NA
SubthemeThe Fellowship of the Ring	1.435
SubthemeThe LEGO Movie Series	1.629
SubthemeThe Little Mermaid	NA
SubthemeThe Old Republic	0.460
SubthemeThe Return of the King	1.113
SubthemeThe Sands of Time	NA
SubthemeThe Simpsons	1.695
SubthemeThe Simpsons series 2	NA
SubthemeThe Two Towers	NA
SubthemeThomas the Tank Engine	0.269
SubthemeTime Twisters	NA
SubthemeTiny Turbos	0.424
SubthemeToa Hordika	1.129
SubthemeToa Inika	1.162
SubthemeToa Mahri	1.012
SubthemeToa Mata	1.197
SubthemeToa Metru	1.089
SubthemeToa Nuva	1.215
SubthemeTogether	0.980
SubthemeToolo	1.967
SubthemeTown	1.203
SubthemeToy Story	0.681
SubthemeToys R Us	NA
SubthemeTraffic	-0.440
SubthemeTrains	2.471
SubthemeTuraga	0.923
SubthemeUFO	0.938
SubthemeUltimate Collector Series	1.352
SubthemeUltimate Collectors Series	0.630
SubthemeUltimate Spider-Man	-0.230
SubthemeUnitron	3.028
SubthemeUniversal	NA
SubthemeVahki	1.294
SubthemeValentines	NA
SubthemeVehicle	NA
SubthemeVehicles	0.325
SubthemeVehicles/Creatures	1.407
SubthemeVirtual Product Collection	2.203

SubthemeVisorak	1.131
SubthemeWarriors	1.149
SubthemeWestern	0.663
SubthemeWilliams F1	0.516
SubthemeWinnie the Pooh	0.071
SubthemeWinter Village	-0.202
SubthemeWolfpack	0.796
SubthemeX-Men	-0.015
SubthemeX-Pod	-1.021
SubthemeXalax	1.214
SubthemeYoda Chronicles	0.893
SubthemeZoo	0.858
SubthemeZooters	NA
PackagingBox:AvailabilityLEGOLAND exclusive	NA
PackagingBox with backing card:AvailabilityLEGOLAND exclusive	NA
PackagingBucket:AvailabilityLEGOLAND exclusive	NA
PackagingCanister:AvailabilityLEGOLAND exclusive	NA
PackagingFoil pack:AvailabilityLEGOLAND exclusive	NA
PackagingNot specified:AvailabilityLEGOLAND exclusive	NA
PackagingOther:AvailabilityLEGOLAND exclusive	NA
PackagingPlastic box:AvailabilityLEGOLAND exclusive	NA
PackagingPolybag:AvailabilityLEGOLAND exclusive	NA
PackagingShrink-wrapped:AvailabilityLEGOLAND exclusive	NA
PackagingTag:AvailabilityLEGOLAND exclusive	NA
PackagingBox:AvailabilityNot specified	-1.376
PackagingBox with backing card:AvailabilityNot specified	NA
PackagingBucket:AvailabilityNot specified	NA
PackagingCanister:AvailabilityNot specified	NA
PackagingFoil pack:AvailabilityNot specified	-0.612
PackagingNot specified:AvailabilityNot specified	-1.384
PackagingOther:AvailabilityNot specified	NA
PackagingPlastic box:AvailabilityNot specified	3.113
PackagingPolybag:AvailabilityNot specified	NA
PackagingShrink-wrapped:AvailabilityNot specified	NA
PackagingTag:AvailabilityNot specified	NA
PackagingBox:AvailabilityPromotional	-0.660
PackagingBox with backing card:AvailabilityPromotional	NA
PackagingBucket:AvailabilityPromotional	NA
PackagingCanister:AvailabilityPromotional	NA
PackagingFoil pack:AvailabilityPromotional	NA
PackagingNot specified:AvailabilityPromotional	NA
PackagingOther:AvailabilityPromotional	3.517
PackagingPlastic box:AvailabilityPromotional	NA

PackagingPolybag:AvailabilityPromotional	NA
PackagingShrink-wrapped:AvailabilityPromotional	NA
PackagingTag:AvailabilityPromotional	NA
PackagingBox:AvailabilityPromotional (Airline)	0.558
PackagingBox with backing card:AvailabilityPromotional (Airline)	NA
PackagingBucket:AvailabilityPromotional (Airline)	NA
PackagingCanister:AvailabilityPromotional (Airline)	NA
PackagingFoil pack:AvailabilityPromotional (Airline)	NA
PackagingNot specified:AvailabilityPromotional (Airline)	NA
PackagingOther:AvailabilityPromotional (Airline)	NA
PackagingPlastic box:AvailabilityPromotional (Airline)	NA
PackagingPolybag:AvailabilityPromotional (Airline)	NA
PackagingShrink-wrapped:AvailabilityPromotional (Airline)	NA
PackagingTag:AvailabilityPromotional (Airline)	NA
PackagingBox:AvailabilityRetail	0.286
PackagingBox with backing card:AvailabilityRetail	2.176
PackagingBucket:AvailabilityRetail	NA
PackagingCanister:AvailabilityRetail	NA
PackagingFoil pack:AvailabilityRetail	NA
PackagingNot specified:AvailabilityRetail	NA
PackagingOther:AvailabilityRetail	3.691
PackagingPlastic box:AvailabilityRetail	NA
PackagingPolybag:AvailabilityRetail	0.231
PackagingShrink-wrapped:AvailabilityRetail	NA
PackagingTag:AvailabilityRetail	NA
PackagingBox:AvailabilityRetail - limited	-3.611
PackagingBox with backing card:AvailabilityRetail - limited	NA
PackagingBucket:AvailabilityRetail - limited	NA
PackagingCanister:AvailabilityRetail - limited	NA
PackagingFoil pack:AvailabilityRetail - limited	NA
PackagingNot specified:AvailabilityRetail - limited	NA
PackagingOther:AvailabilityRetail - limited	NA
PackagingPlastic box:AvailabilityRetail - limited	NA
PackagingPolybag:AvailabilityRetail - limited	-3.023
PackagingShrink-wrapped:AvailabilityRetail - limited	NA
PackagingTag:AvailabilityRetail - limited	NA
PackagingBox:AvailabilityUnknown	-0.091
PackagingBox with backing card:AvailabilityUnknown	NA
PackagingBucket:AvailabilityUnknown	NA
PackagingCanister:AvailabilityUnknown	NA
PackagingFoil pack:AvailabilityUnknown	NA
PackagingNot specified:AvailabilityUnknown	NA
PackagingOther:AvailabilityUnknown	NA

PackagingPlastic box:AvailabilityUnknown	NA
PackagingPolybag:AvailabilityUnknown	NA
PackagingShrink-wrapped:AvailabilityUnknown	NA
PackagingTag:AvailabilityUnknown	NA
	Pr(> t)
(Intercept)	2.04e-05 ***
Year	1.94e-05 ***
Pieces	< 2e-16 ***
Minifigures	< 2e-16 ***
PackagingBox	0.802590
PackagingBox with backing card	0.021943 *
PackagingBucket	0.888616
PackagingCanister	0.132960
PackagingFoil pack	0.428436
PackagingNot specified	0.885896
PackagingOther	0.000178 ***
PackagingPlastic box	0.040141 *
PackagingPolybag	0.267334
PackagingShrink-wrapped	0.274473
PackagingTag	0.893804
AvailabilityLEGOLAND exclusive	0.823284
AvailabilityNot specified	0.154177
AvailabilityPromotional	0.304923
AvailabilityPromotional (Airline)	0.599947
AvailabilityRetail	0.783137
AvailabilityRetail - limited	0.000472 ***
AvailabilityUnknown	0.685528
ThemeAdvanced Models	7.21e-05 ***
ThemeAdventurers	0.901836
ThemeAlpha Team	0.942382
ThemeAquazone	0.774879
ThemeArchitecture	0.934374
ThemeAssorted	0.871206
ThemeBaby	0.268362
ThemeBasic	0.178589
ThemeBelville	0.891233
ThemeBen 10	0.282844
ThemeBionicle	0.268513
ThemeBricks and More	0.762223
ThemeBulk Bricks	0.631284
ThemeCastle	0.140588
ThemeCity	0.736274
ThemeClikits	0.411773

ThemeCollectable Minifigures	0.080439 .
ThemeCreator	0.667510
ThemeDacta	1.26e-05 ***
ThemeDC Comics Super Heroes	0.888076
ThemeDisney Princess	0.967323
ThemeDuplo	0.011445 *
ThemeEducation	0.000151 ***
ThemeExo-Force	0.286041
ThemeExplore	0.833444
ThemeFactory	0.321494
ThemeFriends	0.997621
ThemeGames	0.252733
ThemeHarry Potter	0.209433
ThemeIndiana Jones	0.822821
ThemeJuniors	0.159455
ThemeLegends of Chima	0.637688
ThemeLEGOLAND	0.161351
ThemeMarvel Super Heroes	0.898333
ThemeMindstorms	2.15e-05 ***
ThemeMinecraft	0.786329
ThemeMiscellaneous	0.928883
ThemeMixels	0.444535
ThemeMonster Fighters	0.885992
ThemeNinjago	0.922420
ThemePirates	0.066230 .
ThemePower Functions	0.057081 .
ThemePrince of Persia	0.454563
ThemePromotional	0.971240
ThemeRacers	0.160582
ThemeSamsonite	0.967949
ThemeSeasonal	0.954252
ThemeService Packs	0.813879
ThemeSpace	0.692384
ThemeSports	0.423112
ThemeStar Wars	0.193629
ThemeStudios	0.375289
ThemeTechnic	0.029267 *
ThemeTeenage Mutant Ninja Turtles	0.497650
ThemeThe Hobbit	0.325599
ThemeThe Lord of the Rings	0.168137
ThemeTime Cruisers	0.819529
ThemeTown	0.916538
ThemeTrains	0.504253

ThemeWestern	0.508711
ThemeWorld City	0.738076
Subtheme1.5	0.011180 *
Subtheme2.0	5.69e-09 ***
Subtheme4.5/12 V	0.865617
Subtheme9 V	0.688066
SubthemeAccessories	0.561961
SubthemeAdventurers	0.009894 **
SubthemeAge of Ultron	0.892355
SubthemeAgori	0.279501
SubthemeAircraft	0.095215 .
SubthemeAirjitzu	0.901953
SubthemeAirport	0.626242
SubthemeAladdin	0.858297
SubthemeAlien Conquest	0.992061
SubthemeAlien Force	NA
SubthemeAn Unexpected Journey	0.154893
SubthemeAnimals series 1	0.668265
SubthemeAnimals series 2	0.651271
SubthemeAnimals series 3	0.666741
SubthemeAnimals series 4	0.563934
SubthemeAnimals series 5	0.679906
SubthemeAquanauts	0.503907
SubthemeAquaraiders	0.463729
SubthemeAquasharks	0.473901
SubthemeAquazone	0.400150
SubthemeArchitect Series	0.272531
SubthemeArctic	0.582813
SubthemeAvengers	0.908898
SubthemeAvengers Assemble	0.887001
SubthemeBaby	0.581449
SubthemeBarraki	0.274110
SubthemeBasic	0.113928
SubthemeBasketball	0.479848
SubthemeBatman	0.809238
SubthemeBattle Figures	0.098686 .
SubthemeBattle Pack	0.319383
SubthemeBattle Vehicles	0.173040
SubthemeBeing Me	0.544931
SubthemeBelville	0.505049
SubthemeBirthday	0.814195
SubthemeBlack Falcons	0.849115
SubthemeBlack Knights	0.432037

SubthemeBlacktron	0.721761
SubthemeBlacktron 2	0.334100
SubthemeBoats	0.834407
SubthemeBob the Builder	0.780703
SubthemeBohrok	0.227537
SubthemeBohrok Va	0.372161
SubthemeBohrok-Kal	0.241509
SubthemeBonus/Value Pack	0.683094
SubthemeBooster pack	0.853242
SubthemeBrave	0.868686
SubthemeBuildings	1.74e-14 ***
SubthemeCargo	0.927201
SubthemeCars	0.247294
SubthemeCastle	0.266041
SubthemeChamber of Secrets	0.536501
SubthemeChristmas	0.697818
SubthemeCinderella	0.798588
SubthemeCircus	0.864930
SubthemeCity	0.444745
SubthemeClassic	0.437055
SubthemeCoast Guard	0.913773
SubthemeCoastguard	0.836665
SubthemeCombi-pack	0.080097 .
SubthemeCompetition	0.179602
SubthemeConstraction	0.690627
SubthemeConstruction	0.784081
SubthemeCowboys	0.526213
SubthemeCrusaders	0.305986
SubthemeCube Dudes	0.044664 *
SubthemeCustom Cars	0.536699
SubthemeDark Forest	0.537810
SubthemeDeathly Hallows	0.923470
SubthemeDeep Jungle	0.440506
SubthemeDeep Sea Explorers	0.560909
SubthemeDesert	0.726880
SubthemeDesigner Set	0.066662 .
SubthemeDesk accessory	0.666874
SubthemeDino	0.346747
SubthemeDino Island	0.561962
SubthemeDisney	0.633945
SubthemeDisney Planes	0.757353
SubthemeDisney Princess	0.910231
SubthemeDisney's Baby Mickey	NA

SubthemeDivers	0.534900
SubthemeDolls	0.822381
SubthemeDora the Explorer	0.398691
SubthemeDragon Knights	0.169702
SubthemeDrome Racers	0.051179 .
SubthemeDuplo	0.346852
SubthemeEaster	0.992838
SubthemeEmergency	0.822869
SubthemeEpisode I	0.966663
SubthemeEpisode II	0.654117
SubthemeEpisode III	0.768136
SubthemeEpisode IV-VI	0.545406
SubthemeEpisode V	0.110816
SubthemeEpisode VII	0.182694
SubthemeEV3	0.002391 **
SubthemeExpanded Universe	0.637316
SubthemeExplore	0.117732
SubthemeExploriens	0.653538
SubthemeExtreme Team	0.987668
SubthemeFairground	0.033077 *
SubthemeFairy-Tale	0.393261
SubthemeFairytale	0.119371
SubthemeFall	0.910567
SubthemeFantasy Era	0.487569
SubthemeFarm	0.695762
SubthemeFerrari	0.589337
SubthemeFire	0.888045
SubthemeFlight	0.906117
SubthemeFootball	0.394465
SubthemeForest Animals	0.966433
SubthemeForest Fire	0.745695
SubthemeForest Police	0.947373
SubthemeForestmen	0.458647
SubthemeFright Knights	0.305224
SubthemeFrozen	0.970245
SubthemeFuturon	0.201620
SubthemeGalaxy Squad	0.991763
SubthemeGeneral	0.453857
SubthemeGlatorian	0.198489
SubthemeGlatorian Legends	0.194306
SubthemeGoblet of Fire	0.762750
SubthemeGolden City	0.268468
SubthemeGravity Games	0.879301

SubthemeGuardians of the Galaxy	0.998598
SubthemeHalf-Blood Prince	0.939948
SubthemeHalloween	0.979473
SubthemeHarbour	0.363621
SubthemeHeroica	NA
SubthemeHockey	0.478875
SubthemeHoliday	0.834556
SubthemeHydronauts	0.386810
SubthemeIce Planet 2002	0.524224
SubthemeImagination	0.230171
SubthemeImperial Armada	0.117304
SubthemeImperial Guards	0.085951 .
SubthemeIndians	NA
SubthemeInsectoids	0.396639
SubthemeInventor Set	0.968629
SubthemeIron Man 3	0.791253
SubthemeIslanders	0.084326 .
SubthemeJake and the Never Land Pirates	0.930650
SubthemeJungle	0.531973
SubthemeJungle Rescue	0.616588
SubthemeJurassic Park III	0.337670
SubthemeJustice League	0.924107
SubthemeKingdom of the Crystal Skull	0.252093
SubthemeKingdoms	0.617911
SubthemeKnights' Kingdom I	0.236336
SubthemeKnights' Kingdom II	0.249307
SubthemeLamborghini	0.840461
SubthemeLandmark series	0.106559
SubthemeLandmark Series	NA
SubthemeLarge Vehicle	0.823755
SubthemeLast Crusade	0.543714
SubthemeLaunch Command	0.942913
SubthemeLegend Beasts	0.934816
SubthemeLEGO brand store opening set	0.964253
SubthemeLEGO brand stores	0.639166
SubthemeLEGO Universe	0.930937
SubthemeLEGO Ville	0.176558
SubthemeLeisure	0.878614
SubthemeLife On Mars	0.795418
SubthemeLion Knights	0.440211
SubthemeLittle Forest Friends	0.769694
SubthemeLogic	0.081660 .
SubthemeM-Tron	0.494907

SubthemeMaersk	0.028630 *
SubthemeMaintenance	0.976260
SubthemeMan of Steel	0.855728
SubthemeMars Mission	0.633371
SubthemeMatoran	0.310080
SubthemeMedical	0.874026
SubthemeMicro World	0.193531
SubthemeMicroFighters	0.810611
SubthemeMindstorms	0.001030 **
SubthemeMini building set	0.734641
SubthemeMini Building Set	0.474991
SubthemeMinifig Pack	0.662579
SubthemeMinifig-scale	NA
SubthemeMinifigure collection	0.968954
SubthemeMining	0.825433
SubthemeMiscellaneous	0.412325
SubthemeMission Deep Freeze	0.905907
SubthemeMission Deep Sea	0.944638
SubthemeMistika	0.196245
SubthemeModel Maker	NA
SubthemeModular Buildings	0.000344 ***
SubthemeMonorail	0.001425 **
SubthemeMosaic	3.09e-10 ***
SubthemeMovie	NA
SubthemeMuji	0.452088
SubthemeMy Own Creation	0.454750
SubthemeNinja	0.368331
SubthemeNXT	0.021207 *
SubthemeNXT 2.0	< 2e-16 ***
SubthemeOrder of the Phoenix	0.665184
SubthemeOrient Expedition	NA
SubthemeOriginal	NA
SubthemeOutback	0.977068
SubthemeOutdoor RC	1.14e-12 ***
SubthemeParadisa	0.666830
SubthemePhantoka	0.189365
SubthemePhilosopher's Stone	0.380708
SubthemePhone game	0.518492
SubthemePhoto frames/albums	0.934293
SubthemePiraka	0.251382
SubthemePirates	0.108561
SubthemePlanes	0.488155
SubthemePlanet Set	0.671483

SubthemePlaysets	0.971172
SubthemePolice	0.864736
SubthemePolice and Rescue	0.987567
SubthemePostal	0.974211
SubthemePower Racers	0.362354
SubthemePrincess Castle	0.304704
SubthemePrisoner of Azkaban	0.383402
SubthemeProduct Collection	0.250286
SubthemePromotional	0.921324
SubthemeRace	0.929479
SubthemeRacing	0.826795
SubthemeRadio-Control	0.033802 *
SubthemeRahaga	0.388047
SubthemeRahi	0.025270 *
SubthemeRahkshi	0.220802
SubthemeRaiders of the Lost Ark	0.401885
SubthemeRebels	0.976672
SubthemeRes-Q	0.917081
SubthemeRescue	0.200614
SubthemeRobo Riders	0.001282 **
SubthemeRoboForce	0.781480
SubthemeRoyal Knights	0.317685
SubthemeScala	0.508952
SubthemeSculptures	0.133947
SubthemeSeasonal	0.789811
SubthemeSeries 01	0.050301 .
SubthemeSeries 02	0.050301 .
SubthemeSeries 03	0.046047 *
SubthemeSeries 04	0.046047 *
SubthemeSeries 05	0.045890 *
SubthemeSeries 06	0.094075 .
SubthemeSeries 07	0.094375 .
SubthemeSeries 08	0.094150 .
SubthemeSeries 09	0.098229 .
SubthemeSeries 1	0.951417
SubthemeSeries 10	0.093264 .
SubthemeSeries 11	0.092470 .
SubthemeSeries 12	0.091993 .
SubthemeSeries 13	0.110241
SubthemeSeries 2	0.983768
SubthemeSeries 3	0.981457
SubthemeSeries 4	0.995203
SubthemeSeries 5	NA

SubthemeShell	0.709034
SubthemeShops and Services	0.725584
SubthemeSleeping Beauty	0.742627
SubthemeSlizer	0.001592 **
SubthemeSpace	0.380607
SubthemeSpace Police	0.647989
SubthemeSpace Police 2	0.452555
SubthemeSpace Police 3	0.989073
SubthemeSpace Port	0.683120
SubthemeSpecial	0.998716
SubthemeSpeed Racer	0.753558
SubthemeSpeed Slammers	0.001163 **
SubthemeSpeedorz	0.646210
SubthemeSpider-Man	0.472297
SubthemeSpinners	0.726582
SubthemeSpring	0.922898
SubthemeSpyrius	0.745735
SubthemeStar Wars	0.818497
SubthemeStars	0.271960
SubthemeStingrays	0.575407
SubthemeStorage	0.341265
SubthemeSummer	0.911839
SubthemeSuperman	0.750354
SubthemeSupplementaries	0.030182 *
SubthemeSupplementary	0.535166
SubthemeSwamp Police	0.956447
SubthemeSystem	0.488987
SubthemeTangled	0.884562
SubthemeTeam GB	0.101128
SubthemeTechnic	0.174166
SubthemeTemple of Doom	NA
SubthemeThanksgiving	0.969335
SubthemeThe Battle of the Five Armies	0.153922
SubthemeThe Clone Wars	0.439609
SubthemeThe Dark Knight Trilogy	0.907765
SubthemeThe Desolation of Smaug	NA
SubthemeThe Fellowship of the Ring	0.151407
SubthemeThe LEGO Movie Series	0.103348
SubthemeThe Little Mermaid	NA
SubthemeThe Old Republic	0.645624
SubthemeThe Return of the King	0.265624
SubthemeThe Sands of Time	NA
SubthemeThe Simpsons	0.090094 .

SubthemeThe Simpsons series 2	NA
SubthemeThe Two Towers	NA
SubthemeThomas the Tank Engine	0.787645
SubthemeTime Twisters	NA
SubthemeTiny Turbos	0.671585
SubthemeToa Hordika	0.258971
SubthemeToa Inika	0.245195
SubthemeToa Mahri	0.311677
SubthemeToa Mata	0.231291
SubthemeToa Metru	0.276330
SubthemeToa Nuva	0.224445
SubthemeTogether	0.327202
SubthemeToolo	0.049215 *
SubthemeTown	0.228879
SubthemeToy Story	0.495927
SubthemeToys R Us	NA
SubthemeTraffic	0.659669
SubthemeTrains	0.013518 *
SubthemeTuraga	0.356275
SubthemeUFO	0.348335
SubthemeUltimate Collector Series	0.176606
SubthemeUltimate Collectors Series	0.528596
SubthemeUltimate Spider-Man	0.817948
SubthemeUnitron	0.002485 **
SubthemeUniversal	NA
SubthemeVahki	0.195787
SubthemeValentines	NA
SubthemeVehicle	NA
SubthemeVehicles	0.744833
SubthemeVehicles/Creatures	0.159448
SubthemeVirtual Product Collection	0.027677 *
SubthemeVisorak	0.258344
SubthemeWarriors	0.250482
SubthemeWestern	0.507463
SubthemeWilliams F1	0.606175
SubthemeWinnie the Pooh	0.943488
SubthemeWinter Village	0.840228
SubthemeWolfpack	0.425935
SubthemeX-Men	0.988050
SubthemeX-Pod	0.307406
SubthemeXalax	0.224694
SubthemeYoda Chronicles	0.372024
SubthemeZoo	0.390727

SubthemeZooters	NA
PackagingBox:AvailabilityLEGOLAND exclusive	NA
PackagingBox with backing card:AvailabilityLEGOLAND exclusive	NA
PackagingBucket:AvailabilityLEGOLAND exclusive	NA
PackagingCanister:AvailabilityLEGOLAND exclusive	NA
PackagingFoil pack:AvailabilityLEGOLAND exclusive	NA
PackagingNot specified:AvailabilityLEGOLAND exclusive	NA
PackagingOther:AvailabilityLEGOLAND exclusive	NA
PackagingPlastic box:AvailabilityLEGOLAND exclusive	NA
PackagingPolybag:AvailabilityLEGOLAND exclusive	NA
PackagingShrink-wrapped:AvailabilityLEGOLAND exclusive	NA
PackagingTag:AvailabilityLEGOLAND exclusive	NA
PackagingBox:AvailabilityNot specified	0.168845
PackagingBox with backing card:AvailabilityNot specified	NA
PackagingBucket:AvailabilityNot specified	NA
PackagingCanister:AvailabilityNot specified	NA
PackagingFoil pack:AvailabilityNot specified	0.540469
PackagingNot specified:AvailabilityNot specified	0.166566
PackagingOther:AvailabilityNot specified	NA
PackagingPlastic box:AvailabilityNot specified	0.001870 **
PackagingPolybag:AvailabilityNot specified	NA
PackagingShrink-wrapped:AvailabilityNot specified	NA
PackagingTag:AvailabilityNot specified	NA
PackagingBox:AvailabilityPromotional	0.509233
PackagingBox with backing card:AvailabilityPromotional	NA
PackagingBucket:AvailabilityPromotional	NA
PackagingCanister:AvailabilityPromotional	NA
PackagingFoil pack:AvailabilityPromotional	NA
PackagingNot specified:AvailabilityPromotional	NA
PackagingOther:AvailabilityPromotional	0.000443 ***
PackagingPlastic box:AvailabilityPromotional	NA
PackagingPolybag:AvailabilityPromotional	NA
PackagingShrink-wrapped:AvailabilityPromotional	NA
PackagingTag:AvailabilityPromotional	NA
PackagingBox:AvailabilityPromotional (Airline)	0.576580
PackagingBox with backing card:AvailabilityPromotional (Airline)	NA
PackagingBucket:AvailabilityPromotional (Airline)	NA
PackagingCanister:AvailabilityPromotional (Airline)	NA
PackagingFoil pack:AvailabilityPromotional (Airline)	NA
PackagingNot specified:AvailabilityPromotional (Airline)	NA
PackagingOther:AvailabilityPromotional (Airline)	NA
PackagingPlastic box:AvailabilityPromotional (Airline)	NA
PackagingPolybag:AvailabilityPromotional (Airline)	NA

PackagingShrink-wrapped:AvailabilityPromotional (Airline)	NA
PackagingTag:AvailabilityPromotional (Airline)	NA
PackagingBox:AvailabilityRetail	0.775165
PackagingBox with backing card:AvailabilityRetail	0.029661 *
PackagingBucket:AvailabilityRetail	NA
PackagingCanister:AvailabilityRetail	NA
PackagingFoil pack:AvailabilityRetail	NA
PackagingNot specified:AvailabilityRetail	NA
PackagingOther:AvailabilityRetail	0.000227 ***
PackagingPlastic box:AvailabilityRetail	NA
PackagingPolybag:AvailabilityRetail	0.817520
PackagingShrink-wrapped:AvailabilityRetail	NA
PackagingTag:AvailabilityRetail	NA
PackagingBox:AvailabilityRetail - limited	0.000310 ***
PackagingBox with backing card:AvailabilityRetail - limited	NA
PackagingBucket:AvailabilityRetail - limited	NA
PackagingCanister:AvailabilityRetail - limited	NA
PackagingFoil pack:AvailabilityRetail - limited	NA
PackagingNot specified:AvailabilityRetail - limited	NA
PackagingOther:AvailabilityRetail - limited	NA
PackagingPlastic box:AvailabilityRetail - limited	NA
PackagingPolybag:AvailabilityRetail - limited	0.002520 **
PackagingShrink-wrapped:AvailabilityRetail - limited	NA
PackagingTag:AvailabilityRetail - limited	NA
PackagingBox:AvailabilityUnknown	0.927379
PackagingBox with backing card:AvailabilityUnknown	NA
PackagingBucket:AvailabilityUnknown	NA
PackagingCanister:AvailabilityUnknown	NA
PackagingFoil pack:AvailabilityUnknown	NA
PackagingNot specified:AvailabilityUnknown	NA
PackagingOther:AvailabilityUnknown	NA
PackagingPlastic box:AvailabilityUnknown	NA
PackagingPolybag:AvailabilityUnknown	NA
PackagingShrink-wrapped:AvailabilityUnknown	NA
PackagingTag:AvailabilityUnknown	NA

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 14.81 on 3187 degrees of freedom

(2070 observations deleted due to missingness)

Multiple R-squared: 0.863, Adjusted R-squared: 0.8451

F-statistic: 48.25 on 416 and 3187 DF, p-value: < 2.2e-16

```
car::Anova(lego_model)
```

Note: model has aliased coefficients
sums of squares computed by model comparison

Anova Table (Type II tests)

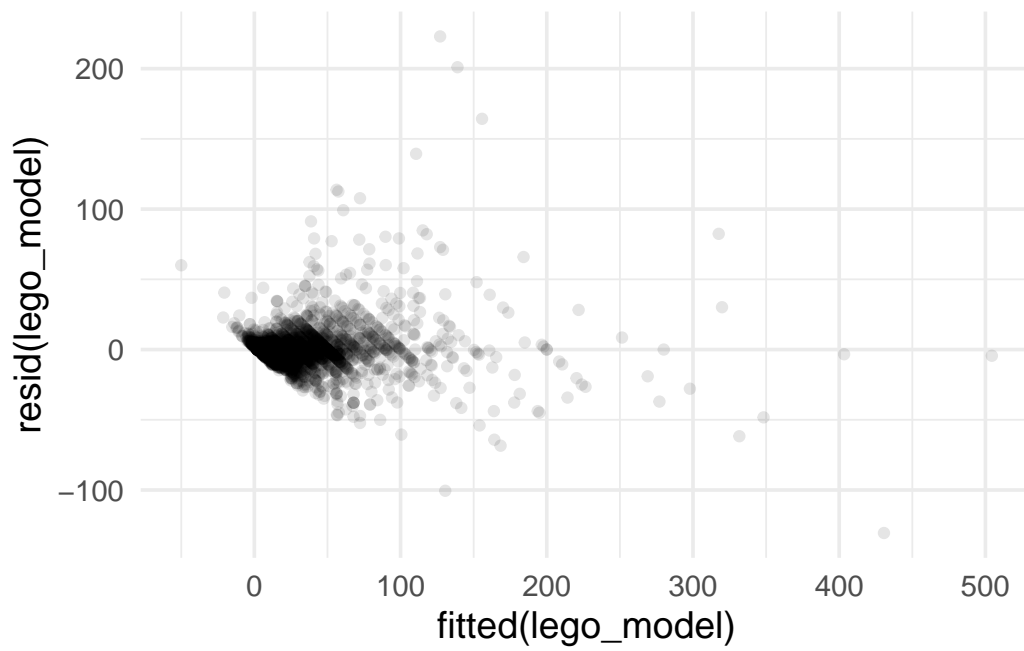
Response: Price

	Sum Sq	Df	F value	Pr(>F)	
Year	4013	1	18.3062	1.936e-05	***
Pieces	1045708	1	4770.7704	< 2.2e-16	***
Minifigures	22304	1	101.7572	< 2.2e-16	***
Packaging	4287	11	1.7780	0.05228	.
Availability	684	7	0.4460	0.87342	
Theme	35425	38	4.2531	< 2.2e-16	***
Subtheme	236567	320	3.3727	< 2.2e-16	***
Packaging:Availability	10018	14	3.2645	3.430e-05	***
Residuals	698560	3187			

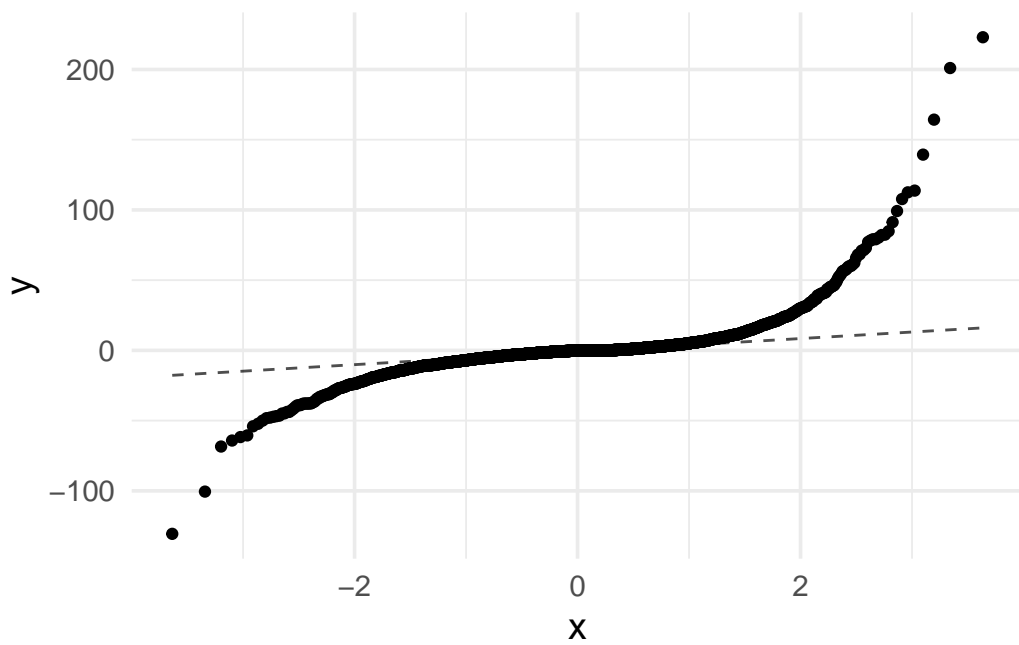
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Assessment

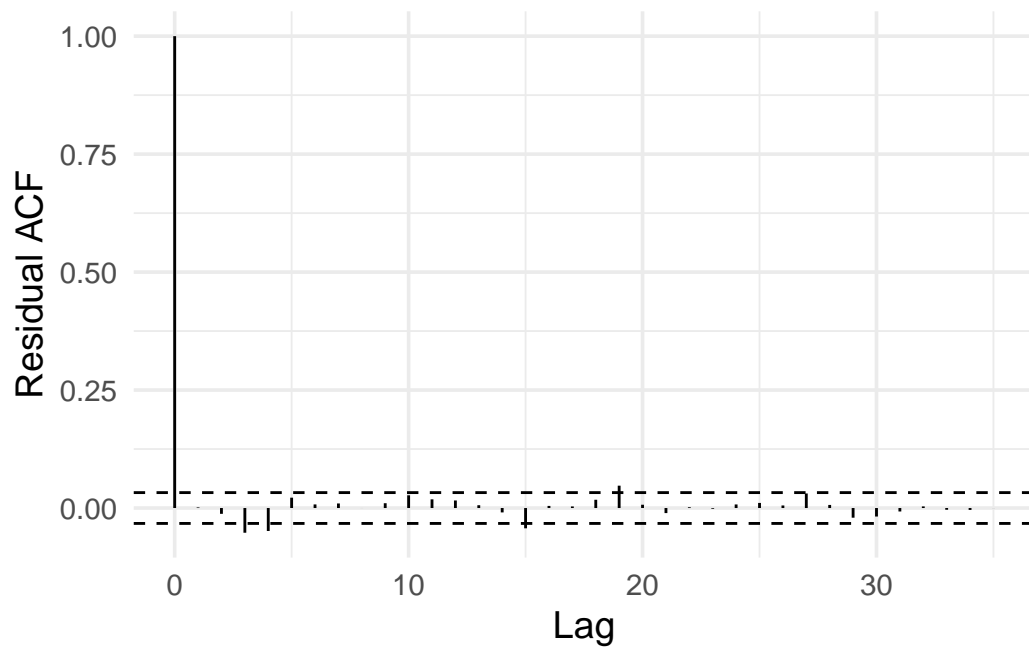
```
gf_point(resid(lego_model) ~  
         fitted(lego_model),  
         alpha = 0.1)
```



```
gf_qq(~resid(lego_model)) |>  
gf_qqline()
```



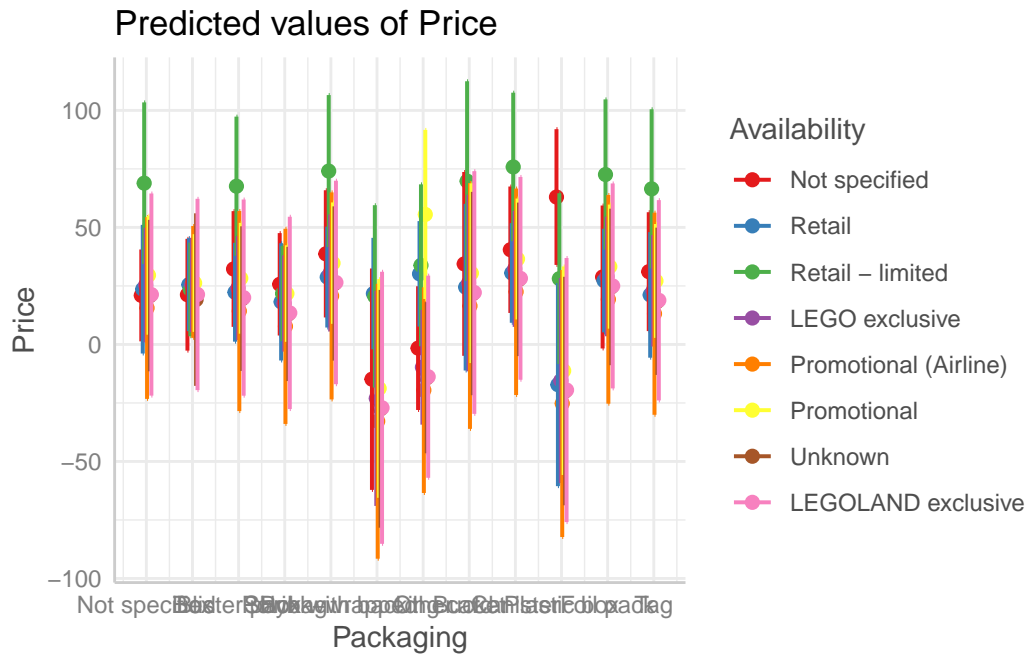
```
gf_acf(~lego_model)
```



Prediction Plots

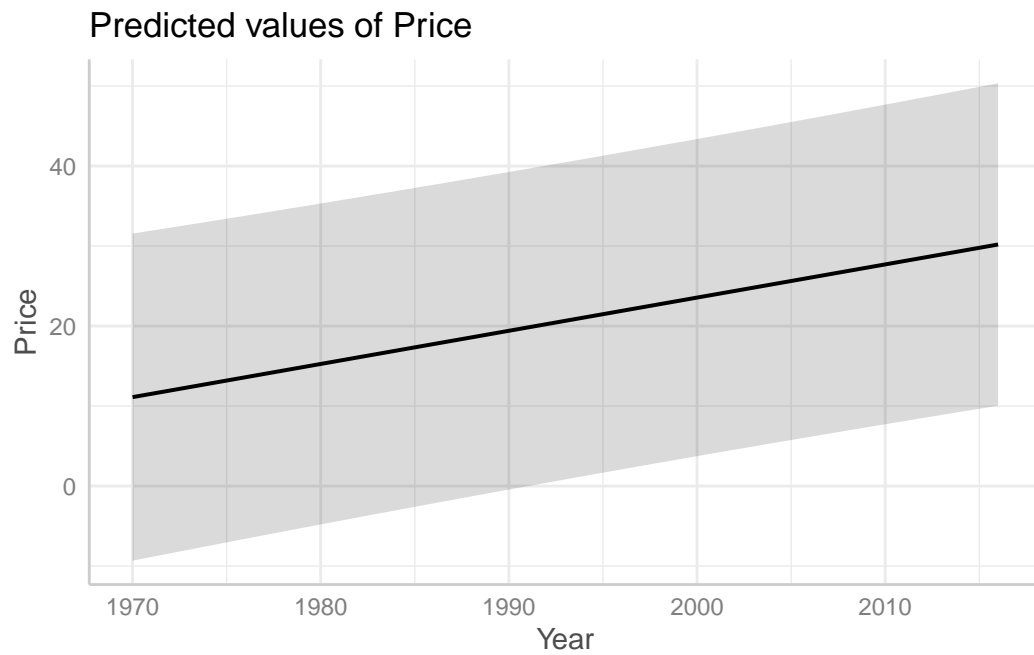
```
ggpredict(lego_model,  
          terms = c('Packaging', 'Availability')) |>  
plot()
```

Warning in predict.lm(model, newdata = data_grid, type = "response", se.fit =
se, : prediction from rank-deficient fit; attr(*, "non-estim") has doubtful
cases



```
ggpredict(lego_model, 'Year') |>
  plot()
```

Warning in predict.lm(model, newdata = data_grid, type = "response", se.fit = se, : prediction from rank-deficient fit; attr(*, "non-estim") has doubtful cases



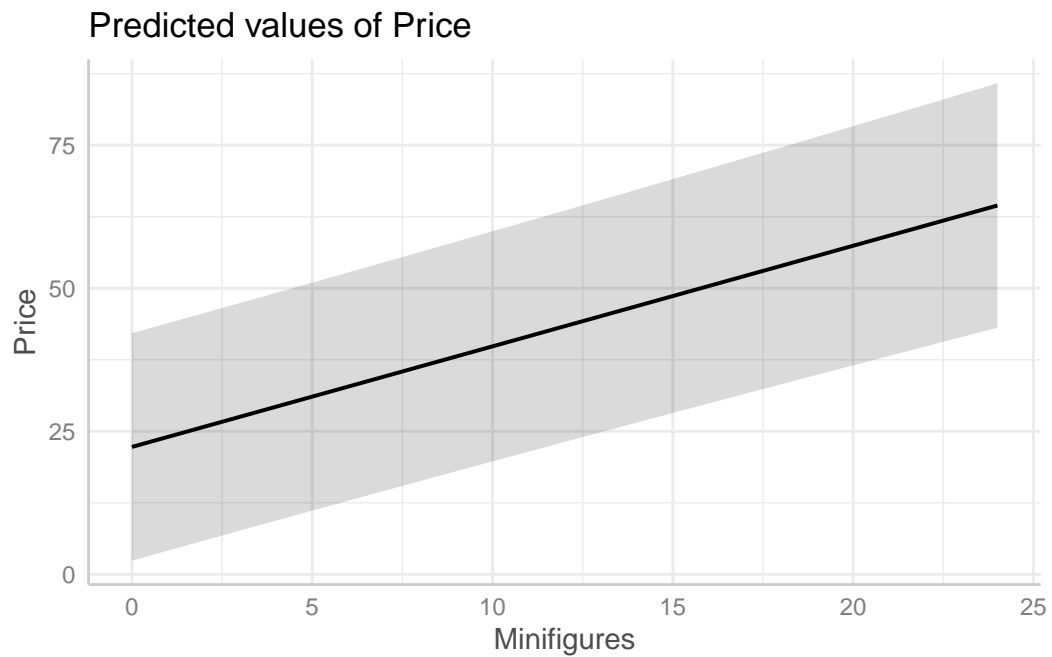
```
ggpredict(lego_model, 'Pieces')|>  
plot()
```

Warning in predict.lm(model, newdata = data_grid, type = "response", se.fit =
se, : prediction from rank-deficient fit; attr(*, "non-estim") has doubtful
cases



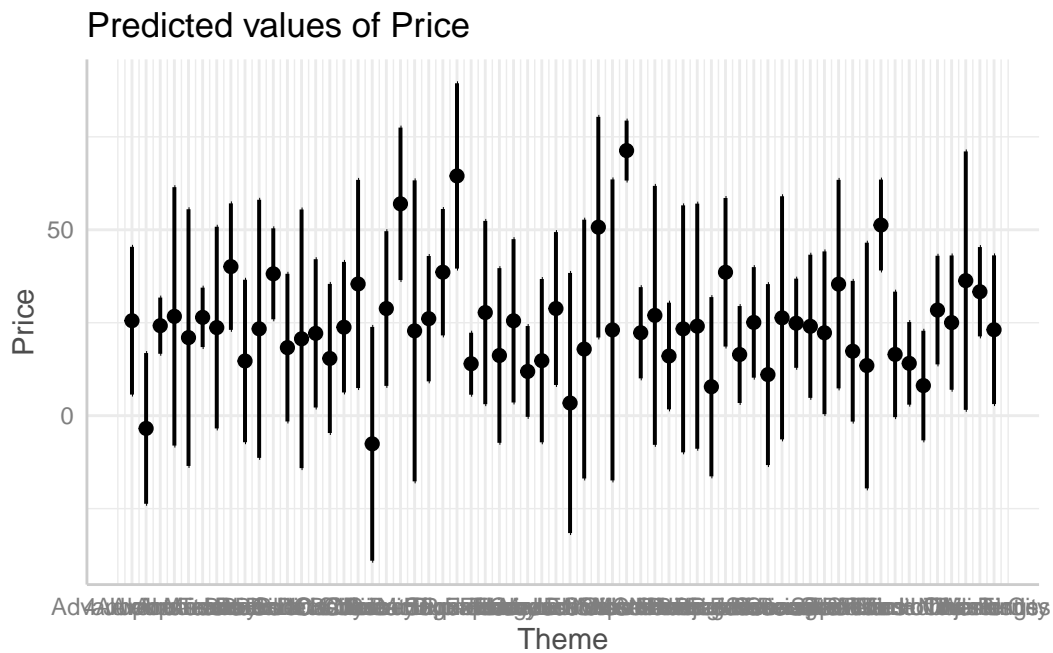
```
ggpredict(lego_model, 'Minifigures') |>  
  plot()
```

Warning in predict.lm(model, newdata = data_grid, type = "response", se.fit =
se, : prediction from rank-deficient fit; attr(*, "non-estim") has doubtful
cases



```
ggpredict(lego_model, 'Theme') |>  
plot()
```

Warning in predict.lm(model, newdata = data_grid, type = "response", se.fit = se, : prediction from rank-deficient fit; attr(*, "non-estim") has doubtful cases



```
ggpredict(lego_model, 'Subtheme') |>
  plot()
```

Warning in predict.lm(model, newdata = data_grid, type = "response", se.fit = se, : prediction from rank-deficient fit; attr(*, "non-estim") has doubtful cases

